

## Proposal Abstracts 689 – 789

**689** **Affective Regulation Disorders in Risk Samples: Validation of an Observational Instrument of Mother-Infant Interactive System**

*Anna Maria Speranza, Cristina Trentini, Marilena Celani (Italy)*

Infant Research has proved the existence of early competencies in the infant, directed to promote interactive exchanges with the mother (Murray & Trevarthen, 1985). This approach has underlined the construct of sensitivity (Ainsworth et al, 1978), as mother's emotional availability to answer in a contingent way to her infant's needs through affective attunement (Stern, 1985). Mutual regulation is mediated by the transactions between infant's ability to regulate his own emotional states and the repeated interactions with the mother, around the achievement of the homeostasis (Sroufe, 1995). Research has revealed that maternal depressive symptoms or psychosocial risk factors can undermine the quality of the relation and compromise infant's normal development. We present a new observational instrument of mother-infant interaction, in order to value its psychometric properties and to define its clinical application in risk and normal samples. The Mother-Infant Interactive System Scales (Speranza et al, 2003) have been utilized to observe dyadic interactions in three different moments: at 3 months, by Feeding Scale (Chatoor et al, 1997); at 6 months by Still-Face Paradigm (Tronick et al, 1978); at 12 months during the Strange Situation (Ainsworth et al, 1978). Preliminary results indicate that mother-infant interactive behaviors differ in risk situations compared with normal conditions. We found that different risk situations influence infant responsive and self-regulatory behaviors and that infant's interactive patterns present continuity during the first year of life.

**690** **Short-term Intervention in Baby-Parent Day-Hospital Unit: Indications and Possibilities to Prevent and Treat Relationship Problems**

*Pirjo Leijala, Hannu Leijala, Sari Jarvi, Esa Nordling, Kaisu Rauhala, Tarja Huhtala, Helena Viitanen, Paivi Salo (Finland)*

The clinical project (1.9.2004-31.10.2006) called "Infant Psychiatric Day-Hospital Unit " was created to develop assessment and psychological treatment for infants and parents with early interaction problems. Because the unit is new also co-operation with other professionals e.g. child health centre was developed. During the first year 58 children of 53 families were referred to the project. The main reasons for reference were psychiatric problems of parents and serious concern of parenthood. Seven families were recommended to the intensive, three weeks day-hospital period. The indications for the intensive period were severe relationship problems or a risk of developing disturbances. During that period both the psychotherapeutic and the psycho-educative methods were used. Diagnostic classification 0-3 was used in clinical practice. Parent infant interaction was videotaped in free situations. The dyads were rated using the Emotional Availability Scales (EAS; Biringen, Robinson & Emde, 1998). The hospital and child health centre records concerning the baby were available for use. The experiences of co-operative work as well as the experiences of the therapists were collected. In Poster Workshop results of the project are presented. The process of intensive day-hospital period will be illustrated by using one case presentation.

**691** **Mother-Infant Synchrony and Maternal and Child Cardiac Vagal Tone**

*Magi Moshe, Ruth Feldman (Israel)*

Regulation of the parasympathetic system, as indexed by cardiac vagal tone (Vna), is thought to play a role in the infant's social engagement, yet the relations between maternal and child's Vna and face-to-face coordination have not been examined in depth. One hundred 3- and 6-month old infants and their mothers were videotaped in face-to-face play while attached to an ECG monitor. Micro-level coding assessed gaze, affect, vocalization, and touch, and cardiac output was analyzed with Porges's MXEdit system. Higher maternal Vna was related to more frequent maternal touch. Mothers with higher Vna engaged in more joint attention and their infants showed higher levels of social gaze and lower frequencies of gaze aversion. Higher infant Vna was related to higher maternal positive affect and to increased joint attention. Infants with high vagal tone had shorter latencies to object focus and their mothers were quicker to present objects during play. Spectral

analyses revealed concordance between maternal and infant heart-rate patterns. Maternal depressive symptoms correlated with low interactive coordination, less touch and joint attention, and lower maternal Vna. Findings support the links between autonomic regulation and the emergence of social relatedness, point to specific mechanisms by which physiological regulation may impact on social attention and exploration, and underscore the mutual- influences between maternal and child's physiology, mood, and behavior.

**692 Motherhood from the Maternal Confidence Viewpoint**

*Lydie Ayissi, Hubin-Gayte Mylane (France)*

According to Bandura (1977), self-efficacy is defined as beliefs about one's capacity to success in a specific task. Many authors widened this concept with the task "of parenting" and although they use various terminologies, they are interested in parental perceptions of their competences as "caregiver". Researches show relations between the mother self- efficacy and her representations of the child or the nature of the interactions. In all theses studies, self-efficacy is evaluated when the child is aged a few months and even a few years. Our purpose is to examine the influence of maternal confidence, evaluated in the immediate postpartum, on the mother's representations of their new-born's behaviors and its impact on the later interaction between the mother and her baby aged of 2 months. 34 mothers were seen at J3. They were asked to answer the MABS questionnaire (Wolke, 2001) which evaluate the maternal representations about the baby's behaviors and also maternal confidence in parenting. The 2 months old children were filmed in interaction with their mother in a situation of free play (Crittenden, 1988). The results show that, in the postpartum period, none of the mother feel low confident. Furthermore, the more they perceive themselves as low confident, the more they judged their infant as irritable. Lastly, the mothers who perceived themselves as very confident are the least sensitive in the interaction. The results will be discussed during the presentation.

**693 Stimulating Sensitivity in Parents of Young Children (2-5 years) with a Multi System Developmental Disorder or a Regulatory Disorder**

*Elisabeth Marlies van Dijk, Maren C. van Niel, Hedwig J.A. van Bakel (Netherlands)*

In the past years a considerable number of infants in the Infant Unit of the Mental Health Center "Meerkanten" in the Netherlands is diagnosed with a multisystem developmental disorder (MSDD, 17%) or regulatory disorder (RD, 35%). The relationship between parents and infants with MSDD or RD is often characterized by stressful and problematic interactions, by a lack of optimal parental sensitivity (Keren, et al., 2001) and by little positive affect in the child. Low quality parent- child interactions have been found to be significantly related to behavior problems and socio-emotional disturbances in the child's life. Therefore, the parent-child relationship should be the focus of assessment and interventions (Zeanah, Larrieu, Scott Heller & Valliere, 2000). To enhance the quality of parental interactive behavior we developed an integrative group-therapeutic program which is based on behavior-therapeutic (Bandura, 1986, 1997; Rose, 1989) as well as on psychodynamic principles (Beebe, 2003). With this program we aim to improve the emotional availability of the dyad (Biringen et al., 1998), to enhance the child's socio-emotional development and to decrease experienced parental stress. The therapeutic program (12 weekly sessions and a follow up three months later) primarily uses videotaped interactions of the parent-infant dyads as a tool to structure the session and to improve parental emotional availability. A pilot study of the integrative group-therapeutic program in twelve parent- infant dyads will be presented and the results will be discussed.

**694 Maternal Psychopathology and Behavioral Characteristics of the Mother-Child Interaction - A Pilot Study**

*Mette Hoeyer (Denmark)*

The specific behavioural pattern in mother-infant interactions in families with a history of schizophrenia is not well documented empirically. Few investigations have been conducted, and the results are inconsistent. 127 mothers and their children aged 0 to three years participated in an prospective intervention study in Copenhagen conducted by dr. L. Lier, M. Gammeltoft & I. Junge. As part of this study the mother-infant interaction in a semistructured play-situation was recorded on VHS. 15 of those mother-infant dyads was selected for the initial testing of an observation

method developed to examine whether a maternal schizophrenic disorder in itself furthers specific and maladaptive patterns in mother-infant interactions. The observation method, which is developed based on ethological principles, will be presented. Results bearing on the examination of variations in mother-infant interaction behavior and adaptation will be presented along with a preliminary discussion on the relation between these and the mother's psychopathology.

**695 The Continuity of Maternal Sensitivity from 0 to 2 and Risk Factors for Dyssynchrony in Interaction**

*Kaarina Kemppinen, Kirsti Kumpulainen, Jutta Raita-Hasu, Irma Moilanen, Hanna Ebeling (Finland)*

Early maternal sensitivity and the continuity in sensitivity are important factors predicting the child's future development and for well-directed interventions it is important to identify the dyads at high risk. We report data from two year follow-up study, the Well Baby Clinic Study. The findings of our study (n=75) suggest that maternal sensitivity assessed by CARE-Index is moderately stable over a two-year period from early infancy to two years of age. The stability of sensitivity was especially clear among mothers who managed to create mutual synchrony in interaction with infants, as 89% of these mothers were also assessed as above the intervention level two years later. But also half of the mothers scored below the intervention level in the interaction with the infant were in the same category also two years later. Low maternal sensitivity and high maternal control predicted low child cooperation two years later. Dyads assessed as low in maternal sensitivity at both assessment points were identified in the interaction in infancy according to low scorings in sensitivity and in affect items, and very high scorings in either control or unresponsiveness. Maternal depression, unplanned pregnancy, unemployment and male sex of the infant were found to be risk factors in infancy, and the first three factors also to years later. Most (80%) of the mothers with low sensitivity at both assessment points reported prenatal depressive symptoms. This study suggests that the dyads at risk of continuing problems in interaction can be identified early for intervention.

**696 The Parental Experience and Perception of Giving Birth under Water for their First Child and the Related First Parent-Child Interactions**

*Lotta de Coster, Françoise de Gheest, Despina Naziri (Belgium)*

The birth under water could be a way of bringing together the best of natural childbirth with modern medicine. This practice of childbirth excludes epidural analgesia but the hot bath itself attenuates labor pains. The present poster presents some results of a qualitative research carried out on 6 primigravid mothers and their partners on the impact of taking a hot water bath during labour, delivery and childbirth, on the birth experience and the early parent-child relationship. The methods that were used to study the perception of the birth experience and the early interaction with the baby on a conscious and unconscious level were an anamnesis, a semi-directive interview, a projective test and a test of differential semantics. Results concerning the mother showed that she described 1) a richer experience of her body at the moment of the childbirth ; 2) a feeling of being more active with better self control ; 3) a higher self esteem coming from the absence of medication 4) a better way of experiencing the active-passive duality of the childbirth. In regards to the father, results showed that the waterbirth made him feel much more involved. In respect to the early mother-child relationship, the mothers described how the baby participated actively in the interaction. In conclusion, it appears that the birth under water is associated with several positive aspects and that it contributes to creating good conditions in the early parent-child relationship and interaction.

**697 The Effects of a Music and Movement Program on Mother-Infant Interactions**

*Wendy Vlismas, Stephen Malloch (Australia)*

The effects of a Music and Movement (M&M) program devised for first-time mothers with infants between 2 and 6 months of age were examined. Study 1 investigated the efficacy of the M&M program over a 5-week period by randomly assigning 96 healthy mother-infant pairs to two experimental and two control groups as follows: (a) weekly 1-hour face-to-face group instruction of the M&M program (b) self-instruction of the M&M program (c) weekly 1-hour face-to-face group instruction of a play program (d) a no contact, no program control group. Pre- and post-test results from questionnaires showed both implementation methods of the M&M program to be equivalent.

Mother-Infant interactions and Maternal Postnatal Attachment results for the M&M program groups significantly increased, with those of the two control groups' decreasing. Study 2 investigated the effects of the M&M program on mother-infant behavioural exchanges. Forty four healthy mother-infant pairs were randomly assigned to two groups over a 5-week period; a self-instructional M&M program group and a control group. Mother-infant play interactions were rated from video data. Results showed a significant increase of dyadic reciprocity for those in the M&M program group and a decrease for the control group. Vowel analysis of mothers' Infant Directed Speech showed a significant increase in total mean duration, pitch and vowel range for the M&M group, with those of the control group decreasing. The music and movement program provided mothers with the communicative means to enhance interactions with their infants.

**698 Mothers and Infants at Play: Links between Maternal Sensitivity and Infant Behavior**  
*Rachel Lucas-Thompson, Jennifer Miner, Wendy Goldberg, Elysia Davis, Curt Sandman (United States)*

Sensitive mothering is linked to attachment, sociability, and contentedness; less research has focused on development beyond the socio-emotional realm. The purpose of this study was to further examine links between sensitivity and infant behavior in a diverse sample. Mothers were recruited during their first trimester for a study of prenatal stress; analyses for this presentation are based on 90 dyads who participated in an observation of play when the infants were six months old. Videotaped play was reliably coded and composites were created. A maternal sensitivity composite represents sensitivity, intrusiveness reversed, and positive regard; an infant positivity composite represents positive mood, negative mood reversed, and sociability. Maternal cognitive stimulation, infant activity level, and infant sustained attention were also coded. Results of preliminary analyses indicate that mothers who exhibited greater sensitivity provided infants with more cognitive stimulation. Furthermore, more sensitive mothers had infants who displayed greater sustained attention. The results of this study point to the importance of examining infant behavior in relation to maternal behavior. When mothers were more sensitive, their infants demonstrated greater focus during their interactions. These mothers also provided their infants with more cognitive stimulation, increases in which are related to developmental progress. These early findings are consistent with the position that maternal sensitivity and responsiveness may benefit infants cognitively and socially.

**699 Maternal Representations in Hospitalized Mothers**  
*Carmen Trumello, Carla Candelori (Italy)*

Pregnancy may bring about deep modifications of intrapsychic representations of self and other. Different maternal psychological styles may be recognized during this period, concerning fantasies, convictions, expectations and the mother-child relationship itself. But what happens when the woman must be hospitalised in the last months of pregnancy? The aim of our research was to explore content and organization of maternal representations in 25 hospitalized women, between 25th and 32nd week of pregnancy and after the birth of the child. As measures we used two semistructured interviews: IRMAG, to study maternal representations during pregnancy, and IRMAN, to assess representations four months after the delivery (Ammaniti, Candelori et al., 1991,1995). Three categories of representations emerged: balanced, disengaged and ambivalent. Our results show many differences between these mothers (with an high percent of disengaged representations) and not hospitalized ones , underlying the risk for the future mother-child interactions.

**700 Impact on Mother's Representations and Early Mother-Infant Interactions of a Scan Anomaly during Prenatal Supervision**

*Sylvie Viaux, Ouriel Rosenblum, Daniele Vauthier, Philippe Mazet, David Cohen (France)*  
Pregnancy is an important stage in processes of the woman's identity structuring. During this so particular period of her life the woman shows an important "psychic transparency", that also signs a psychic vulnerability. The arising of a suspicion on her child's integrity to come reaches her representation's models and trouble her interactions with the child descended of this pregnancy and by this slant this child's development. In order to put in evidence these disruptions, we followed two groups of women (n=17): a group presenting a "pregnancy supervised" following a suspected scan

and a group control, at three time (during the last quarter of pregnancy, to the childbirth and the child's two months). We present the first results of this survey. During pregnancy, mother described a suspension of infant investment, with perturbation of foetus' representation ( $p < 0.05$ ). At the birth, the infant-mother meeting is tense. The dyad is not well dynamic ( $p = 0.03$ ). Mother is anxious and this anxiety increase across the time ( $p < 0.05$ ). A preventive psychologic care of these patients associated with the obstetrical supervision would be interesting.

**701 From Image to Meaning: A Process of Video Interaction Guidance in Different Clinical Contexts**

*Grazyna Kmitya, Wanda Urmanska (Poland)*

The importance of parent-infant relationship for human development has been widely recognized and provides a useful framework for therapeutic and preventive intervention with infants, toddlers and their families. In our workshop we adopt the basic model of mother-infant relationship elaborated by N. Stern-Bruschweiler and D. Stern. Our aim is to analyze a relatively new therapeutic approach, a video interaction guidance, in which the analysis of video-recorded, naturally occurring affective interactions is used as a port of entry for early intervention aimed at supporting parent-infant relationship. A key process here is making a bridge between observable behavior captured in a video image and its psychological meaning. Clinical examples are provided of work in three different therapeutic contexts: 1) with preterm children and their parents in a NICU 2) with full term "difficult to feed" newborns and their mothers at home, and 3) with infants and their parents referred to an out-patient therapeutic centre. Preliminary data will be presented as to the evaluation of the intervention.

**702 An Experience of Preventive Early Intervention with Mother-Baby Dyads in Chile**

*Maria-Pia Santelices, Chamarrita Farkas, Marcela Aracena (Chile)*

Actually, in Chile a growing concern exists to promote a healthy bond between the baby and its caregivers through different approaches implemented in the Services of Health. However, the investigations on this topic are scarce and there is a lack of empiric results that sustain the effectiveness of promoting a secure attachment of babies in the Chilean sociocultural context. In the School of Psychology of the Pontificia Universidad Católica de Chile a Program of Promotion of Secure Attachment has been created (P.A.S.) as part of a FONDECYT Grant that considers a group psychological intervention with pregnant women, which extends during the first year of the babies life. We will present the experience (results) with a group of 50 babies and their mothers. We will discuss in detail the objectives, contents and methodology of the P.A.S. Program, emphasizing the relevant subjects during the psychological interventions with the mother- baby dyads, in an interdisciplinary context with nurses and pediatricians. Interventions were performed at the 3, 6, 9 and 12 months of baby's age during the health controls in the services of pediatry.

**703 Projective Kit for Early Childhood (PKEC): A New Projective Baby-test**

*Pascal Roman, Mathilde Dublineau (France)*

Projective Kit for Early Childhood (P.K.E.C.) : a new projective baby-test The P.K.E.C. (P. Roman, 2004) is a test to be used by psychologists working in the field of early childhood. It is the first projective test available for evaluating the psychoaffective dynamics of children from six months to four years of age . The principal aspects of this test are : - a standardized play test using material which is simple and accessible for children, offered both as a mediator in the clinical encounter and as a medium for the child's cathexes, - guidelines for the interpretation of observed play based on a definition of the situation which is proposed and on specific, psychodynamically oriented scoring tools, - a comparison of the observations obtained from data gathered in a study done with a population of children not in consultation (140 children divided into age groups at every six month interval starting at six months and continuing through forty-seven months, both boys and girls) This test is a precious tool for the evaluation of affective psychodynamics of young children, based on a psychodynamic approach to personality. This test will be presented in its different aspects, with clinical examples from experimental study and from a research based on family configuration in situation of prolonged breast-feeding.

**704 Interdisciplinary Mother Child Station of the University Clinic Homburg**

*Susanne Zink (Germany)*

Introduction: Since March 2005 a mother-child ward was implemented in cooperation with hospitals for child and youth psychiatry and psychotherapy, and adult psychiatry and psychotherapy, University Saarland Hospital Homburg. This model of two hospitals is the first in Germany. Psychiatric disturbance of the mother or child is the primary condition for admission to the ward. The ward cares for babies and infants from the age of 0-5 years with disturbances of behaviour regulation, in particular feeding disorders and failure to thrive. Children with other psychological disturbances, such as aggressiveness, hyperactivity, and emotional disturbances are treated as well. Mothers with psychological disorders, postpartum depression or long-term psychological disturbances, such as affective disorders and psychosis, are treated as well. Methods: Since January 3, 2005, 50 children and 42 mothers with psychiatric disorders were treated in the mother-child ward. A special interview was taken with each pair of mother/children. Regular physical examinations of the child and the mother took place. Further, CBCL and SCL-90 questionnaires were completed by the mother. The psychiatric disorders of the mother were classified according to ICD-10 and the child according to those of DC:0-3. Results: We will present the development of the ward, our experiences with assessment and therapy and examples of video supported interaction-centred mother-child therapies.

**705 The Effect of Mother-Infant Interaction Training on Promoting Coordinated Joint Attention**

*Yoonkyung Jeong, Keumjoo Kwak (Korean Republic (south))*

The present study examined the effect of training program that focused on mother-infant interaction on the development of coordinated joint attention(CJA). Participants included 120 twenty-four-month-old infants recruited from several provinces in Korea and half of them were randomly assigned to the training group. The training program was developed to incorporate various social plays for infants, some of which are specifically designed for improving joint attentional skills, such as pointing and gaze-following. Mother and infants in training group were visited by our program trainer for 4 months with an interval of 2 weeks. To investigate the effect of our program, mother-infant interactions in free play settings were video-taped during pre-test(24 month) and post-test(28 month) for both treatment and control groups. For measuring CJA, five minutes of observation was coded using coding scheme from Bakeman and Adamson. The results revealed that the amount of CJA significantly increased with age. More importantly the rate of the increase in amount of CJA was significantly higher in the training than that in the control group. In addition, the duration of a single CJA episode increased with a higher rate for the training than for the control group. Our results suggest that enhancing infants' social engagement with their mothers indeed promotes the development of CJA, one important aspect of social development in infancy, although further studies are needed to investigate whether this efficacy persists for later development.

**706 Infant Massage, Dyadic Behavior, and the Infant with Blindness: A Case Study**

*Grace Lappin (United States)*

This exploratory study observed and documented the process and dynamics of synchronicity and attachment where an infant had blindness and received massage. A qualitative methodology was used to describe the interactions of the dyad. Interviews, videotaped observations, field notes, and focus group discussions characterized a quad-angular system of data collection. The infant was an 11-month-old boy born at 5 months gestation with retinopathy of prematurity; the caregiver was the infant's 34-year-old biological mother. Prior to the caregiver being taught infant massage the dynamic nature of the dyad included the mother's inability to read her infant's cues, little appropriate physical, verbal, or visual interaction with her child, flat affect, and rigid body; the infant's interactions were reciprocal and reflected insecure attachment. After the caregiver was taught infant massage the dynamic nature of the dyad changed and included increased appropriate physical contact, positive affect, engagement of the child by the mother, direct vocalization, and increased ability to read infant's cues; the infant's interactions were again reciprocal and reflected more secure attachment. In addition, the infant demonstrated beginning awareness of self and space. In this respect, if infant massage can be utilized as an intervention to promote sensitive dyadic communication and more secure attachment, possible developmental delays may be prevented and these infants may eventually obtain greater social, emotional, and educational achievements.

**707 Visually Handicapped Mothers Parental Guidance, Before, During and After the Pregnancy and the Course of their Mother-Infant Relationships**

*Edith Thoueille, Michel Soule, Drina Candilis Huisman, Martine Vermillard, Linda Morisseau (France)*

VISUALLY HANDICAPPED MOTHERS PARENTAL GUIDANCE, BEFORE, DURING AND AFTER THE PREGNANCY AND THE COURSE OF THEIR MOTHER-INFANT RELATIONSHIPS Senior author : Edith THOUEILLE – INSTITUT DE PERINATOLOGIE - 26 bd Brune 75014 PARIS FRANCE email : edith.thoueille@erenis.fr Edith Thoueille, Michel Soule, Drina Candilis, Martine Vermillard, Linda Morisseau (France) Since a long time, the motherhood was not advised and even forbidden for visually handicapped mothers. However, the motherhood - so considered as a hopecarrier for them- must be supported to facilitate the pregnancy process, the delivery and also a good enough care giving of their newborn and infant. Usual technics must be adapted, especially at the different stages of the mother-to-be process: -echography -birth -NBAS examination -care giving to the baby. This particular follow up permitted us to know better of the communication channels between a new mother and her baby which fill the lack of visual channel, too exclusively studied until now. It permitted us also to study the models of security distance between mother and child. Our observations let us have a better strategy for developing an early support and prevention for non clinical dyads and triads

**708 The Influence of Psychological Separation-Individuation On Maternal-Infant Attachment in Adolescent Mothers**

*Rachele Aiello, Sandra Lancaster (Australia)*

This paper examines the effect of separation- individuation on mother-to-infant attachment in Australian adolescent mothers. First time pregnant adolescents (n=79) were recruited from Monash Medical Centre in Melbourne, Australia. Background information and degree of separation-individuation was assessed during pregnancy. At several stages across the infant's first year of life, the mother's feelings of attachment to her infant were measured. As expected, levels of separation-individuation predicted maternal feelings of attachment towards the infant during the postpartum period. Adolescent mothers with greater levels of separation-individuation reported greater attachment to their infant. The finding that less separated and individuated adolescents were more likely to have poorer maternal-infant attachment emphasizes the important role of the mother's psychological development in the formation of the attachment relationship between mother and child.

**709 The Effectiveness of Interventions for Feeding Disorders in Infants and Toddlers: A Systematic Review**

*Frederike Arends, Bert Derkx (Netherlands)*

Introduction. Feeding disorders in infants are often complex and can be life threatening. At present no standard protocol for treatment is available. Method. To evaluate the effectiveness of treatment methods for feeding disorders in infants (0 – 36 months) a systematic review was conducted. Online bibliographic databases were searched using two search strategies, namely 1) predefined keywords and 2) PICO search. Data were extracted regarding methods, intervention type, outcome measures, and results. Results. In total 887 studies were identified of which 34 studies met the inclusion criteria (infants aged 0 – 36 months, with the diagnosis feeding disorder and/or non-organic failure to thrive). Most of the studies had small sample sizes, lacked control groups, and the intervention procedures were not well described and quantified. The following treatment strategies have been examined: hospitalisation, medical interventions, home visiting, and psychological interventions. Six randomised controlled trials fulfilled the inclusion criteria of which five examined the effect of home intervention. Two of those five studies reported significant effects of home intervention, whereas the other three studies reported no significant effects. Conclusions. This review shows that many interventions are used for the treatment of infants with feeding disorders. However, systematic applications of interventions could not be found. Moreover, only six randomised controlled studies were retrieved. There is clearly a need for more evidence-based studies in this research domain.

**710 The Breakfast Club: A multidisciplinary treatment program for eating disorders in**

**infancy**

*Hadas Avni, Lihl Geva Lisser, Shoshy Belkowitz, Yaffa Shiff, Ganit Lupo, Neta Guttmamm Avner (Israel)*

The "Breakfast Club" A multidisciplinary treatment program for eating disorders in infancy An out-patients clinic for eating disorders in infancy has been operating in the Tel-Aviv Medical Center. The clinic works according to a multidisciplinary concept and employs therapists specializing in different fields: pediatrics, psychology, speech therapy, nutrition, and social work. This staff diagnoses the child in a joined meeting and offers therapeutic intervention. We have learned from our experience that working as a team is extremely beneficial for these patients diagnostically and treatment wise. In order to offer better therapeutic options we have recently opened a new program called "The Breakfast Club" The "club" is open to healthy infants aged 0-3 years, diagnosed by our team as having feeding and eating difficulties. Each session allows the parents to observe their child from different perspectives of eating and feeding and to benefit from a multidisciplinary therapeutic approach to diagnosis and treatment alike. As for the children, eating in a group helps them learn, imitate and observe while being contained by their parents and therapists By the end of the program we evaluate the progress that has been made with each family in order to decide if further intervention is needed.

**711 Breastfeeding and Mother-Infant Interaction**

*Matthew Thullen, Sydney Hans (United States)*

Although claims have been made that breastfeeding facilitates mother-child interaction, few data are available on that issue. A sample of 248 young, pregnant African-American women, mostly from working class and lower income backgrounds, was recruited through a community health center and prenatal clinics at a major urban medical center. The mothers (mean age 17.6 years) were interviewed during the second trimester of pregnancy, during the postpartum period in the hospital, and at 4-months postpartum. Mothers and their infants were videotaped together at the newborn and 4-month sessions. Using the Parent-Child Observation Guide (PCOG), videotapes were coded for two dimensions of maternal behavior. Sensitive-Responsiveness codes for warmth, gentleness, and attunement to the child's cues (e.g. nestle baby, notice baby's signals, handle/touch baby gently). Encouragement-Guidance examines behavior such as taking pleasure in the child's behavior, playing and talking with child (e.g. initiate eye contact with baby, imitate baby, attempt to get baby into alert state). Mothers who breastfed in the hospital, on average, exhibited a significantly greater number of Sensitive-Responsive behaviors in the newborn interaction and significantly greater number of Encouragement-Guidance behaviors in the 4-month interaction. These relations remained after controlling for other variables that might be related to both breastfeeding and parental behavior, including mother social support, mother psychopathology, parental efficacy, education, and prenatal consideration of breastfeeding.

**712 Breastfeeding and Transitional Object: Influences on Child's Development**

*Margareta Viberg, Lennart Viberg (Sweden)*

BREASTFEEDING AND TRANSITIONAL OBJECT: INFLUENCES ON THE CHILD'S DEVELOPMENT Viberg, L., Viberg, M. (Sweden) A prevalence study focusing on children's use of transitional object (TO) at the ages of 8, 12 and 18 months showed that the use of a TO was related to a shorter period of breastfeeding (<8 months), use of pacifier/thumbsucking and place in sibling order (2nd). No difference girls/boys. The study took place at the Child Health Centre when the children came for their regular check-ups. Questions about TO were interfoliated with routine questions in an attempt to treat TO as a normal phenomenon and not affect the way in which children/parents dealt with TOs. In a follow-up study of the children at age 5 length of breastfeeding and use of a TO/ pacifier/ thumb was related to the developmental level, measured by a school-readiness test. A breastfeeding period  $\geq 8$  months was positively related to development for both boys and girls. Among the children who were breastfed for <8 months, significantly more boys than girls deviated from the expected level of development. Sex and length of breastfeeding were the best predictors of a child's ability to tackle the test. Thumbsucking was negatively related to development; use of a pacifier and TO at the age of 12 resp. 18 months related positively. An extending breastfeeding period seems to be favourable for development in contrast to selfgratifying thumbsucking, without a "providing object". Margareta.Viberg@skane.se Margareta Viberg BHV-



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**713 Percutaneous Endoscopic Gastrostomy Benefits Seriously Diseased Children**

*Tone Lise öitsland, Charlotte Kristensen, Tom Mala, Kristin Bjornland, Anne Faugli, Ragnhild Emblem (Norway)*

Percutaneous endoscopic gastrostomy (PEG) is of great benefit to a population of children with nutritional disorders. A prerequisite has traditionally been need for prolonged enteral feeding. The aim of the study was to analyze the effect of PEG in treating severely diseased or terminally ill children. Of 125 children that received PEG between 1994 and 2002, 30 have died in the follow-up period. All died from their underlying disease, which was neurological (18; of these 12 was progressive), heart disease (6), cancer (4) or other diseases (2). The age at PEG placement was median 21 months (4 months-11.9 years). We performed a semistructured telephone interview of the parents of the children who had died. Time between PEG and death was median 16 months (1.5 months-8 years). Improved feeding and easier administration of medication were reported in all. Getting rid of the nasogastric tube was important for the majority. PEG enabled an overall improvement in the quality of life for the terminally ill child. Parents complained of not having been offered the gastrostomy at an earlier stage. They spontaneously expressed satisfaction by being contacted, and had good memory of details concerning the PEG despite the relatively long time passing between the child's death and the interview. Thus, short expected time for survival should not be a contraindication for offering PEG. The treatment seems to benefit terminally diseased children.

**714 Poisonous Milk: Psychosocial Aspects of Mothers with High Sodium in their Breast Milk Causing Severe Dehydration in their Newborns - A Case Series**

*Aylin Ozbek, Abdullah Kumral, Taner Guvenir, Fatma Varol Tas, Nuray Duman, Hasan Ozkan (Turkey)*

Hypernatremic dehydration in newborns due to high sodium concentrations in breast milk is a rare condition with severe morbidity and mortality. It is commonly associated with failure to establish the normal decrease in breast milk sodium concentration. In addition to biological reasons, maternal stressors were also held responsible for problems in lactation. In this research we aimed to evaluate the psychosocial aspects of a series of mothers with no known biological reasons to account for the high sodium concentrations in their breast milk causing dehydration and hypernatremia in their newborns. Mothers of 21 infants admitting to the neonatology department for hypernatremic dehydration between December 2002-August 2005 was included. The assessment of each mother included a semi-structured interview conducted blind to breast milk sodium concentrations. As reported previously most of the participants are first time mothers. The history of a psychiatric morbidity was also very common. Previous missed pregnancies are almost twice the number attained for the same age group from the Population and Health Survey. Half of the pregnancies were unplanned. Most of the mothers reported various psychosocial stressors during the pregnancy. These findings imply that psychosocial factors might be playing an important role in the etiopathogenesis of hypernatremic dehydration due to high sodium concentrations in breast milk. Our findings might also provide preliminary evidence to the immense emotional interaction between the mother and her infant that are bodily expressed.

**715 Appetitive Behaviors in Infants with Failure to Thrive and in Normally Growing Infants**

*Maria Ramsay, Catherine Zygmuntowicz, Chantal Martel, Mafalda Porporino, Gloria S. Tannenbaum (Canada)*

During the last decade an increasing number of clinicians and researchers recognized that many infants with failure to thrive (FTT) do not experience appetite even in the context of a good mother-child relationship and ability to eat; however, none reported a systematic assessment of appetitive/feeding behaviors. A Composite Appetite Score (CAS) was developed as part of a study measuring hormonal differences in infants with FTT and normally growing infants. The purpose of this presentation is to describe the CAS and to compare the mean CAS in the two groups. The CAS was derived from 3 sources: (1) Parental responses to appetite-related items on a feeding scale prior to assessment; (2) the child's current appetitive behaviors, based on parental responses during the

assessment and (3) the child's feeding behaviors evaluated in the clinic after 3 hours of food deprivation. Nine infants with FTT were compared with 5 normally growing infants. Significant positive correlations were found among the 3 components of the CAS, and the mean CAS was significantly lower in the FTT group ( $4.98 \pm 1.4$  vs.  $17.0 \pm 0$ ,  $p < 0.000$ ).

**716 Development of an Intervention to Increase Mothers' Healthy Feeding Practices with their Infants and Delay Early Solid Food Introduction**

*Mildred Horodynski, Beth Olson, Karen Shirer, Holly Brophy-Herb, Mary Jo Arndt (United States)*

Overweight in children is increasing at an alarming rate. Early introduction of solid foods, prior to the recommended 4-6 months of age, is a risk factor for later overweight. Early introduction of solids, which is considered an unhealthy infant feeding practice, occurs despite nutrition education counseling and provision of educational materials. Results reported here are from Phase I of a long-term research program to develop, implement and evaluate a curricular intervention aimed at delaying the introduction of solid foods in diverse populations. For this portion of the research project, focus groups were conducted with African American and Caucasian low-income mothers. Among both African American and Caucasian mothers, reasons for introducing solids early included the beliefs that infants were not being satisfied by breast milk or formula alone, solids would help their infants sleep through the night, and medical conditions (e.g. acid reflux) warranted the use of solids. Data were also organized within the transtheoretical model of change, a model of intentional behavior change, focused on decision-making. This model provides a way to understand where mothers may be in the decision making process, and, based on these understandings, plan a more strategic and relevant curricular intervention. This poster addresses a theoretically based intervention on infant development along with healthy feeding practices, including delaying solids, in order to increase low-income mothers' knowledge and behavioral skills.

**717 Prematurity: An Infant's Perspective**

*Nichola Lee Coombs (Australia)*

Babies born very prematurely are subject to traumatic, impinging bodily experiences and medical interventions. They are separated from their mothers at birth and deprived of physical and psychic holding as they "survive" in the intensive care. Prematurity is associated with increased morbidity and mortality in the newborn and can result in a spectrum of problems throughout childhood and adolescence. Literature has explored the myriad of physiological vulnerabilities of the infant as well as the challenges to the developing infant-mother relationship. There is, however, a dearth of literature hypothesising the infant's experience of being born pre-term. This presentation introduces Emma, a 16 year-old who was born at 28 weeks gestation, physically and psychologically vulnerable. As an adolescent, she was referred for psychoanalytic psychotherapy due to self-harm, feelings of deserving to be punished, tactile hypersensitivity, fear of choking and poor personal relationships. Emma's therapeutic journey gives important insights into the experience of the pre-term infant, telling of the pain, "alienation" and loneliness experienced, along with the burden of survival. The therapy material richly illustrates the trauma and terror of premature arrival into this world, highlighting the need for psychological care for these infants and their families in the neonatal period and beyond.

**718 The Process of Psychiatric Consultation to Hospitalized Severely Ill Infants and their Families**

*Carolyn Rita Steinberg (Canada)*

Neonatal medical and surgical advances have been considerable in the last 15 years, allowing survival of infants with conditions that previously would have certainly resulted in death. However, some experienced pediatricians noticed a trend that although many of these infants had no medical reasons for developmental delays, they went on to have them. Hospital staff began questioning whether the parent-infant relationship could be a causal factor, and requested psychiatric consultation. It is accepted that early years have a unique impact on the child's development, and that early intervention may at least prevent secondary disturbances. The goals of this presentation are to describe the unique: 1. Consultation requests embedded in attending hospitalized infants, 2. Aspects of assessment necessary in these infants, 3. Expanded treatment modalities including larger

systemic interventions, that may be helpful, and 4. Expanded “targets” of intervention, including hospital staff. The presentation will be illustrated with case examples.

**719 Cancer in Pregnancy: Early Interaction Perspective**

*Florence Schmitt, Jorma Piha (Finland)*

About one per 1000 pregnant women develops cancer during pregnancy (Donegan, 1983). Safe use of chemotherapy during the second and third trimester has been reported without definite neonatal harm, but chemotherapy exposure in utero can also lead to the risks of foetal loss, neonatal death or malformations of the newborn. (Cardonick & Iacobucci, 2004). The literature in early interaction and child psychiatry is silent on the subject, and the literature in oncology focuses on technical issues like the safety of the foetus during chemotherapy. Then, the question of the development of the early interaction between the mother-to-be and the foetus-baby, and later on between the mother and her newborn is a painful question: does the mother dare to attach to her baby if she knows that she or the baby could die? Moreover after the delivery, how does the mother dare to attach to her child and how does this uncertainty affect their relationship? Additionally, it is known that cancer is highly associated with depression and anxiety (Bailey et al., 2005), and that depression and anxiety are associated with pain for the early relationship between the mother and the baby, and in the development of the infant (Diego et al., 2005; Field et al., 2003, 2004). The purpose of this poster is to explore through one case study the implication of a cancer diagnosis and its intensive treatment during pregnancy and early childhood from an interaction perspective.

**720 Mother's Recollections of the Hospitalization of their Premature Infants**

*Reija Latva, Liisa Lehtonen, Raili Salmelin, Tuula Tamminen (Finland)*

A preterm birth and hospitalisation of the infant is stressful and may have long-lasting effects on parenting. If the effects of prematurity persist they may affect the mother-child relationship and child development. Our aim was to study whether “traumatisation” of mothers of preterm infants persist when the child is aged five to six. We investigated the influence of prematurity on the mother’s recollections of the pregnancy, delivery and hospitalisation period. Our study included 27 mothers of preterm and 40 mothers of full-term children, all born in Tampere University Hospital in 1998. Preterm children (< 37 weeks and < 2500g) were admitted to neonatal intensive care unit after delivery. The median hospitalisation duration was 22 days (Q1 17, Q3 28). Median maternal age at delivery was 31 and 32 years in preterm and control groups respectively. Maternal recollections were assessed using the Clinical Interview for High-Risk Parents of Premature Infants (CLIP, Meyer et al. 1993) when the children were aged five to six. CLIP is a semi-structured interview eliciting mothers’ experiences of pregnancy, delivery, hospitalisation period, likewise thoughts and feelings about the child during hospitalisation. This is the first study using CLIP beyond early infancy. We will report 1) the usefulness of CLIP at preschool age, and 2) mothers’ recollections of the hospitalisation period.

**721 Pregnancy and Couple Relationships: An Investigation on Marital Quality**

*Rosetta Castellano, Patrizia Velotti, Anna Maria Delogu, Cecilia Serena Pace, Alessandra Santona (Italy)*

Introduction: The transition to parenthood brings significant changes to the parents as individuals and as couple. This topic has been widely studied, while what happens in the couple’s relationships during the specific period of pregnancy is a new field to investigate. The research: The aim of this study is to investigate some risk factors influencing marital quality during pregnancy: adult attachment, as a personal inner resources for coping with the challenging life events; perceived social support, as an external resource that plays a critical role in this period; psychopathology, as a risk factor for marital quality and for child development (Perren et al., 2003). Methods: The sample consists of 50 couples at the first-time parenthood, living together for a period of time of 3-6 years. Each partner was administered a set of questionnaires evaluating marital quality, adult attachment models, perceived social support and psychopathology. Discussion and conclusion: We will discuss the role of the factors mentioned above on the couples relationships, analyzing the principal and the interactive effects. These results will be also compared with a comparison sample of 50 couples living together for the same period of time but not in pregnancy. Interesting clinical implications can arise from the decision to conduct studies that explore in detail the pregnancy period because in

this way prenatal programs that consider the importance of the couple in the emotional context in which the infant is born can be planned.

**722 Maternal Representations in Prenatal Diagnosis: A Different Dynamic according to Fetal Disease - Heart Disease versus Facial Cleft Lip and Palate**

*B. Beauquier-Maccotta, Cecile Pefourque, Amina Yamgnane, Yves Dumez, Bernard Golse (France)*

Objective : To explore maternal adaptation in prenatal diagnosis and the mental representations of mothers according the pathology of the fetus. Procedure: We included 15 pregnant women waiting for a fetus suffering from heart disease (Group A) and 15 pregnant Women waiting for a fetus suffering from facial cleft lip and palate (Group B). Fetuses of both groups had no comorbidity and were supposed to be treated by surgery after birth. We met the women when the medical explorations were over. We used a semi-structured interview inspired from “entretien R” built by D. Stern; Edinburgh Postnatal Depression Scale EPDS and State Trait Anxiety Inventory STAI; and an analysis of the narrative quality of the discourse using the EDI-CODE procedure. Results: work is still in progress, but preliminary results show a higher score at EDPS in Group B. These women are able to express their emotions, their ambivalence towards their baby and their anguishes of death. In Group A the discourse of mothers is less Fluid, Coherent, Adequate, Reflexive, Authentic on the EDICODE quotation; they have greater difficulties to express their emotions and the memory of themselves as a child. Their relation with their parents is also difficult to evoke. Conclusion: Whereas the medical staff thought that women of Group B were suffering more from the visible disease of their child, it appears that mothers of group A show more difficulties to express their thoughts and emotions. This is an indication of a sideration of the psychic processes occurring normally during pregnancy.

**723 The Impact of Perinatal Haptonomy on the Experience of Pregnancy and the Triadic Relation with the Fetus**

*Elisabeth Berge, Lotta de Coster, Françoise de Gheest (Belgium)*

As prenatal haptonomy is often approached in respect to its contributions for the father, it seems interesting to study its impact on the experience of the mother and more particularly on the foetus-child relation. Moreover, few scientific research exists in the field of these two topics, haptonomy and the mother-foetus relation. This poster proposes a comparison of the experience of the process of going into motherhood (“maternity”) and the mother-child relation between a group of 5 future mothers having chosen a haptonomic preparation and a group of 5 future mothers having chosen prenatal exercises with a kinesiologist. The methodological tools used include: 1) an anamnesis; 2) a semi-directive interview investigating various research orientations in order to explore the conscious dimension of the process of going into motherhood; 3) a projective material to explore the more unconscious processes; 4) the animal allegory or the drawing of the current family (i.e. during the pregnancy) and of the future family (i.e. after birth) in animals. The latter test is intended to lighten the relational dynamics and the representation of the triadic relationship. The results show that the antenatal haptonomy has an incidence on the experience of the pregnancy, the relation and the communication of the mother-foetus and the representations of the baby. The haptonomy stimulates a process of “triadification” of the parent-foetus relation and a process of objectivation of the foetus during pregnancy.

**724 Developmental Risk Status of Children with Deformational Plagiocephaly or Craniosynostosis**

*Vidhya Krishnamurthy, Jamie Pivonka-Jones, Ludmila Zaytsev, Kiti Freier (United States)*

PURPOSE: Current literature generally describes deformational plagiocephaly as a cosmetic condition that has no long-term concerns. In contrast, craniosynostosis (malformational plagiocephaly) is noted to have long-term consequences with respect to development. The purpose of this study was to compare the developmental risk status of infant/toddlers with these diagnoses. (plagiocephaly and craniosynostosis). METHODS: 110 children (58 w/ plagiocephaly and 52 w/ craniosynostosis, 73=males, 37 females, age range 3-24 months) were developmentally screened using the Bayley Infant Neurodevelopmental Screener (BINS). RESULTS: 74% of children with plagiocephaly and 67% of children with craniosynostosis fell within the high-moderate/high risk

range for developmental delay. 85% of children with deformational plagiocephaly and 82% of children with craniosynostosis attained fewer than 50% of items for their age set. The percentage of children at the high- moderate/high risk range was higher at the older age ranges for both groups. CONCLUSIONS: There were no significant differences in the performance of children with plagiocephaly and children with craniosynostosis on the BINS. A subgroup of children with plagiocephaly are at high risk for developmental delays. As early development has significant implications for long term cognitive, social, and emotional development, the need for early identification, intervention, and enrichment is necessary in these populations.

**725 Social Adjustment at School: Do Premature Children experience More Difficulties than other At-risk Children?**

*Line Nadeau, Rejean Tessier (Canada)*

Objectives: The aim of this study was to describe the social experience at school of children with cerebral palsy (CP born or not at term) and compare it with that of children born preterm without CP and with that of their classmates without a disability. Method: The 63 children with CP were recruited from the records of 7 rehabilitation centres. The CP children were divided into two groups : 28 students with CP born at term and 35 students with CP born prematurely. The preterm group (without CP) included 67 children born extremely preterm (EP: < 29 weeks of gestation) with a very low birthweight (<1500g). The 112 comparison children born at term and without any motor and/or sensory impairment were recruited from the class of the child with CP or EP during the school visit. Social adjustment measures (social status, reciprocated friendships, sociability, aggression, social isolation and victimization) were obtained by conducting a class-wide sociometric interview in the class of the child with CP or EP. All children were assessed in grade 5 of primary school. Results: The findings showed that both children with CP (irrespective of their birth status) and EP children were less accepted, had fewer reciprocated friendships, exhibited fewer sociable behaviours, were more isolated and victimized by their peers than their classmates without a disability. Conclusions: These data suggest that children with CP and EP children constitute an at-risk group in terms of social experience, and that any actions to reduce this risk must be implemented before school entry.

**726 Length of Gestation and Body Size at Birth Predict Neurodevelopmental Outcomes at 5 and 20 Months of Age among Children Born at Term**

*Kati Heinonen, Katri Raikkonen, Anu-Katriina Pesonen, Aulikki Lano (Finland)*

In premature babies length of gestation and body size at birth correlate positively with later neurodevelopmental abilities. However, less is known whether this holds for those born at term. The aim of this study was to examine in a prospective study whether length of gestation and body size at birth (weight, length, head circumference and ponderal index) predict neurodevelopmental outcomes at 5 and 20 months among Finnish children (n=1341) born at term and free of any major developmental disabilities (WHO criteria). After adjustments for covariates (e.g., child's gender, and maternal age, education, BMI and smoking) the results showed that birth weight, length and head circumference (adjusted for length of gestation) were positively associated with full-scale of Griffiths' Development Scale (weight only at 20 months). Body size measures were also associated with Griffiths' subscales of personal and social skills, eye and coordination (at 20 months only), and performance. Moreover, length at birth was associated with locomotion and hearing and speech (at 20 months only), and head circumference with hearing and speech. Length of gestation predicted full-scale and subscales, with two exceptions: at 20 months there were no significant associations to hearing and speech, and to eye and hand coordination. Gender of the child did not moderate the associations. Findings emphasize that neurodevelopmental outcomes in early childhood have prenatal origins among children born at term and are in line with the fetal programming hypothesis.

**727 8 Year Status of Preterm Infants with Prenatal and/or Postnatal Growth Problems: A Longitudinal Study**

*Leanne Whiteside-Mansell, Patrick Casey, Kathleen Barrett (United States)*

This study examines the long-term outcomes of preterm (PT), low birth weight (LBW) children diagnosed as failure to thrive, (FTT), small for gestational age, (SGA), or both compared to other LBW/PT children in a secondary analysis of children participating in the Infant Health and

Development Program (IHDP). The IHDP was a randomized clinical trial designed to evaluate the efficacy of a comprehensive intervention in the first 3 years of life. The cohort was enrolled in eight sites and followed to age 8 (age 18 data available in winter of 2005). Comparative analyses between the four growth groups were performed on physical growth, cognitive development, behavior, and academic achievement at 8 years using multivariate analysis procedures controlling for children's birth weight, gender, and ethnicity; maternal education, height, and weight; and infant intervention group assignment. In general, there was a stepwise pattern in all growth variables, with FTT/SGA infants being the smallest followed by FTT only, then SGA only, and finally the normally grown infants being the largest. A similar pattern was seen for cognitive development as was seen with growth. However, no differences were found in problem behavior across the groups. Postnatal growth problems in LBW PT infants, particularly if seen in children who are born SGA, is a marker of higher probability of small size and lower cognitive status and academic achievement at age 8 years.

**728 Surrealist-inspired Collage/montage as Metaphor for Pregnancy and the Early Imaginative Mother-infant Relationship**

*Sophia Xeros-Constantinides (Australia)*

The infant's relational experiences are intimately linked with those of its mother, and may be considered to take their origin from the time of her pregnancy. Pregnancy provides the primary context for the mother-infant relationship, and exerts particular forces on both parties, some of which are only beginning to be understood. This poster proposes a link between the pregnant state, as described by contemporary psychoanalysts, such as Raphael-Leff (1995), and the collage/montage practice of the Surrealists. Collage/montage functions as a fitting metaphor for the prenatal (pregnant) state, especially in its encompassing of duality and contradiction, in its challenge to identity and in its excitation of a psychic imaginary 'space'. This poster presents imagery derived from a collage/montage process, created by artist/clinician Xeros-Constantinides in response to the idea of the procreative female imagination in relation to the implanted conceptus as it develops unseen within the pregnant woman's body.

**729 Perinatal Network and its Containing Function: Clinical Observation and Analyze of Identity Weaving of the Actors and Carers Involved in the Birth**

*Sara Kamierzac (France)*

The Anthropology of Obstetrics reveals that in every time and place, societies have been organized around know-how in order to accommodate the newborn baby. In a preceding ethnopsychological study, it has been underlined how the evolution of these practices could today lead to a human and technical geography functioning in networks, and how that could constitute in terms of institutional, family and individual psychodynamics, a container of thought preventive and therapeutic, when accompanying the somato-psychic difficulties of the baby and his/her environment. The dynamics of the network depends on the way in which everyone of the actors and carers perceives this organization overall, perceives himself/herself, and perceives the people are met there. On the basis of the assumption that the dysfunctions of this system result from inadequacies between the respective places and assignments, roles and other's expectations ; the project of this research is a study of the perinatal identity representations, their function and their impact on the experience of birth of the newborn baby, his family and professionals. Testimonies from Maternities, Neonatology, child psychiatry units, "PMI" and families involved with these units, are currently collected in the form of ethnobiographic direct talks and autoquestionnaires. The examination of the data should proceed by 2007 in the form of crossed semantic analysis, with a thousand of protocols considered. We can propose to present the first elements of this research and to show the psychoprophylactic prospects for them.

**730 Prenatal Prevention of Baby's Abuse And Neglect**

*Francoise Vanhalle (Belgium)*

SOS Enfants ULB (Université Libre de Bruxelles) site in CHU St Pierre in Brussels but does not belong to the hospital staff. His office is to prevent and care child's abuse and neglect. The prenatal prevention consists in detection of risks factors during pregnancy, joint interventions with the hospital staff and the ambulatory non resident professionals to develop a particular project with the

future parents. This consists in social support, in psychological intervention and in establishment of a framework for psychiatrist treatment when the pregnant women suffer a psychiatric trouble. When the risk is moderate, mother and baby return home, with the support of the multidisciplinary staff; heavy situations are generally transmitted to the youth court which decides protective measures (nursery, mother-baby care units). SOS Enfants follows the development of a few babies, other non resident professionals follows the others. We regret that our human resources are insufficient for systematic follow up because a retrospective study performed in 2001 has showed that 18 of 80 babies detected were no longer followed one year after birth. However our actual detection during the pregnancy is far better than several years ago. To improve the prevention it is necessary to maintain watching of these vulnerable babies.

**731 Early Detection of Schizophrenia Vulnerability in Infancy: Is it Possible?**

*Jorge L. Tizon, Jordi Artigue, Josep Ferrando (Spain)*

From the year 2000 we are working in the creation of a questionnaire of detection of the vulnerability toward the schizophrenia and other severe adult disorders by means of the reception and valuation of the data habitually picked up by the pediatric teams of Primary Health Care. In such a sense, the questionnaire LISMEN (Listing of Items of Mental Health) it is applied in two fundamental ways: Revising the pediatric clinical registers or interviewing pediatricians or pediatric nurses. In that way we have carried out the application of the LISMEN in diverse samples: In chronological order, we have applied our screening questionnaire to children in which the pediatricians appreciate an accumulation of psychosocial risk factors (D sample), to schizophrenics or "other psychoses" patients (sample A), to the children offspring of schizophrenic patients (sample B), to general population's children born in a marginal neighborhood, in which accumulate numerous factors of risk (sample E), to general population's children received in the consultations of the Healthy Boy's Program of PHC pediatrics (Sample C) and, retrospectively, to schizophrenic patients accompanied by their parents (Sample F). In the way to the validation of the questionnaire we are mainly working with the samples D and E, and we have find a series of constellations of risk factors apparently very useful, so much to preventive as clinic aims.

**732 Anxiety and Depression from Pregnancy through the Postpartum Period: Risk Factors for Postpartum Depression from a Community Cohort Study**

*Nine Glangeaud-Freudenthal, Anne Angel (France)*

Aim: To identify risk factors for maternal postnatal depressive symptoms (PNDS) and to test a statistical model of risk factors for PNDS during pregnancy and in the early postpartum period. Methods: 329 pregnant women from the ERASME cohort completed questionnaires during pregnancy, just after delivery, and at 2 month postpartum. Their prenatal and postnatal mental health was evaluated with several instruments: CES-D (Radlof), STAIT and STAIS (Spielberger), Maternity Blues Q (Kennerley & Gath), and EPDS (Cox). Information on the physical health of mother and child, their psychosocial environment, traumatic life events and dyadic adjustment (Spanier) was also collected in early and late postpartum. Results: Risk factors for PNDS included prenatal depressive symptoms and maternity blues just after birth, poor relationships with others including the partner, young age (<25 years), and low educational level; the baby's excessive crying and sleep problems were also related to PNDS. We then tested significant risk factors in a logistic regression model for PNDS and obtained the following significant odds ratios: low social support (OR=2.8 CI 1.1-6.9); maternity blues, mainly for women with a low educational level (OR=4.3 CI 1.2-6.9); and prenatal maternal depressive symptoms, regardless of educational level (OR= 3.9 CI 1.8-8.8). Conclusion: Assessment of the risk for maternal mental health problems during the postpartum period must take psychosocial setting into account and consider possible interactions between factors

**733 Early Screening at a Community Well-baby Clinic and Follow-up in the First Year Postpartum: A Preventive Strategy to Improve Mother-Baby Interaction**

*Joelle Rochette, Denis Mellier, Stephane Grisi, Laurence Marguier, Pierre Coulet, Marandet Agnas, Isabella Lefebvre, Marie-Dominique Boirot, Marie-Pierre Blin, Higuero Mylane, Stephane Planche, Labry Carane (France)*

Our longitudinal study focuses on the mental processes used to overcome psychological crises

during early postpartum (PP). The hypothesis is that the quality of the mother-baby dyadic bond at one year can be predicted by the mother's capacity to manage suffering during early PP. Data came from 70 families attending a community 'well-baby clinic'. We compare dyads with disorders (mother's severe "blues", anxiety, phobias and other mental problems, and withdrawal of interest towards their baby, and baby's developmental disorders) and asymptomatic dyads. A longitudinal analysis details the complex mental trajectory of each dyad and describes mother-baby states at 4 different times: early PP, 3, 6 and 12 months PP. Two methodological approaches were used to collect data: standardized instruments and Esther Bick's observational clinical method. Instruments used at each time point were: ADBB (Guedeney), which focuses on the infant's pathological withdrawal, EPDS (Cox), which assesses the mother's depressive status, and PIPE (Fiese) for the quality of mother-baby interaction. Conclusion: 1) The complexity of screening suffering during early PP is due to several factors: the polysemy and instability of dyad problems, which may be expressed interchangeably by mother and by baby, and the variability of their timing; 2) The observation in a community sample of a relation between problems observed during early PP and maternal mental disorders or impairment of child development at one year PP points to the importance of early screening, even for minor disturbances at an early stage, to prevent later disorders.

**734 Impact of Maternal Depressive Symptoms at 6 Weeks Postnatal on Child Developmental Outcomes: A Two-Year Follow-up Study of the Matquid Cohort**  
*Anne-Laure Sutter, Laurence Dequae-Merchadou, Elisabeth Glatigny-Dallay, Marc Louis Bourgeois, Helene Verdoux (France)*

Background: Few studies have investigated whether the impact of maternal postnatal depressive symptoms (PNDS) on child development is related to the persistence or recurrence of maternal depressive symptoms during the first year postpartum. Aim: To assess whether PNDS at 6 weeks predicts impaired child development independently from later maternal depressive symptoms. Method: 497 mother-baby dyads were followed up over 2 years with repeated measures of depressive maternal symptoms and infant cognitive development. Results: Infants of mothers with PNDS at 6 weeks were more likely to present poor cognitive outcome. This association remained significant at a trend level after adjustment for maternal depressive state over the follow-up. A cross-sectional association was found between maternal depressive symptoms and better infant motor performance. Conclusion: The impact of early maternal PNDS on infant cognitive development may be partly explained by the persistence or recurrence of maternal depressive symptoms in the months following postpartum.

**735 Behavior at 3 Years of Very Preterm Infants: The EpiPAGE Cohort Study**  
*Beatrice Larroque, Monique Kaminski, Malika Delobel (France)*

Objectives: To compare the prevalence of behavioural problems between very preterm children and full-term children at 3 years of age in a regionally-defined prospective cohort. Methods: The EPIPAGE study included all infants born between 22 and 32 weeks of gestation in nine regions of France in 1997 and a control group of full-term infants. At three years of age, the behavioral problems of 1228 very preterm singleton children without major neurologic disabilities and 447 term children were evaluated with the Strengths and Difficulties Questionnaire completed by the parents. Results: The very preterm children showed significantly higher rate of behavioural difficulties than full-term children: 20% vs 9% for 'total difficulties', 20% vs 11% for 'hyperactivity', 16% vs 10% for 'conduct problems' and 15% vs 10% for 'emotional symptoms', 14% vs 7% for 'peer problems', 15% vs 11% for less 'prosocial behaviour'. After controlling for gender, mother's age, socioeconomic status and marital status, the differences between very preterm and full-term children were still significant for: 'total difficulties': OR=2.3 CI 1.6-3.3, 'hyperactivity' OR=2.0 CI 1.4-2.8, 'conduct problems' OR=1.7 CI 1.2-2.4, 'emotional symptoms' OR=1.6 CI 1.1-2.4, 'peer problems' OR=1.9 CI 1.3-2.9. These differences for behaviour persisted even when additional factors characterizing the health or development of the child were added to the statistical models. Conclusion: Very preterm children have a higher risk of behavioral problems at three years of age than children born at full-term.

**736 Words to be Born**



*Myriam Szejer (France)*

If symptoms, whether physical or psychic, expressed by mothers, fathers, or their newborn babies may be medically treated, they can also be resituated in the subjective context of each birth and thus be apprehended in parallel on both a medical and a psychoanalytical mode. Therefore they can be considered as transgenerational decodable signs. Suffering, in an analytic sense is to suffer in the work of speaking. But be it of body or soul, it is always symbolic suffering, and the need for speaking is so real that the body may be affected by it in its organization, its functioning and its integrity. This utterance is addressed to whomever it may find, by means of the symptom, which is why analytical "listening in" can be practiced in the earliest moments of life. The analytical work at the maternity ward takes place at the specific moment of the re-inactment of filiation. Women affected by post partum depression show an intense disposition to speak, in an attempt to recognize their child as a subject. During this brief transitional period, psychoanalytical listening can take on a full cathartic dimension for the protagonists concerned.

**737 Maternity Ward and Parents Infant Attachment**

*Evelyne Petroff (France)*

The questions of parenthood which confront couples arises before the birth of the child. The evolution of medical techniques engenders problems the emotional weight of which may encumber the reverie necessary to the psychic construction of maternity & parenthood. The challenge for our maternity des Bluets - Fernand Lamaze, pioneer in birth preparation in the Fifties, is to improve the accompaniment to parenthood by combining medical & affective security with the aim of preventing post-partum depression, & to track & take in charge ill-treatment. The description of the disposition for birth preparation in the institution comprises not only pain control, but also the ethical questions raised by the ante-natal diagnosis, the transcultural aspect of parenthood, paternity, psychosocial exclusion, the adjustment to parent-infant interaction. At the maternity des Bluets which counts 1800 births a year, it involves a continuous training of our carers who question & improve specific professional practises, encouraged by the entire institution, in a philosophy of preventive care, & health education for parents & their newborn.

**738 Communication between Mother and Fetus or Newborn**

*Marie Claire Busnel (France)*

We measured changes in Heart Rate Variability (H.R.V.) while mother either talked about her baby to an adult (1) or communicated directly with the baby either vocally (2) or silently (3). We previously showed that the number of fetus reacting to silent communication (3) was equal to those reacting to a vocal emission: 39 and 37% respectively while (1) elicited only 29,6% of responses. Babies reacted globally less than fetuses, but with the same proportion of responses: 27% for (2), 33% for (3) and 21% for (1). Here, to compare the 3 test H.R.V., was averaged every 30 sec. for 5 min. before, during and after, each stimulus on 103 fetuses and 70 newborns. No significant effects were observed when computing all subjects, for some entered the pre-experimental phase in an agitated state (state 3 or 4) with a high H.R.V., while others were calm with a low H.R.V. (state 1 or 2). The latter increased its variability during stimulation while the high H.R.V. group decreased it. Analysed separately, both groups became significant in all of the series. Babies, as a group, are less significant than fetuses, but also react to all three experimental conditions, including silent communication. This last unexpected result will be discussed for mothers stated that they made extensive use of this mode of communication with their baby.

**739 Lasting Odor Impression from the Mother's Breast**

*Maryse Delaunay-EI Allam (France)*

The time-span of memories acquired in early infancy has been a field of active investigations since Freud's initial proposal of infantile amnesia. Here, we present a naturalistic study examining if an odor associated with breastfeeding can be retained long after exposure has ended. We took advantage of a camomile-scented salve (Ca) prescribed for nipple protection. Two groups of infants, one exposed (Ca+) and one non exposed (Ca-) while breastfeeding, were compared for differential responses to Ca on age 3 days, 7 and 21 months. 3-d-olds underwent a 2-choice test between Ca and control odor pad. The Ca+ group displayed preferential head orientation toward Ca, showing short-term retention. 7-m-olds were sequentially presented 3 toys carrying either Ca, an

unfamiliar scent of violet (V), or nothing (control). Ca+ infants mouthed the Ca-toy longer than the V-toy, whereas Ca- infants mouthed them equally. 21-m-olds were tested for 1) facial response to Ca, 2) differential 'interaction' with 3 toys, one of which being Ca-scented, and 3) relative choice of 2 bottles odorized with either Ca or V. It came out that Ca- infants showed more signs of Ca dislike as compared with Ca+ infants. Further, Ca+ infants again showed closer 'interactions' with Ca-scented objects. These results confirm the early odor awareness of infants while breastfeeding. Further, they reveal that nursing-induced odor memory can still be active more than 1.5 year after the end of exposure. Supported by a grant from Roudnitska Foundation.

**740 Risk Factors for Preterm Delivery and Effect of a Psychological Intervention**

*Nicole Mamelle (France)*

Preterm delivery is the main cause of neonatal mortality and morbidity. The aetiology is multifactorial, including psychosocial factors. Strenuous work conditions or, conversely, being jobless and socially isolated are also risk factors. Stress related to complicated previous pregnancies, insufficient paternal involvement and poor family ties may explain preterm labour in some cases. We showed also that difficulty in adapting to changes in body image, inadequate or poorly developed feelings of fulfilment during pregnancy, a hectic daily lifestyle and excessive reliance on superstitions and popular beliefs are also frequent in women who deliver preterm. We have conducted a before and after study to evaluate the effect of a psychological intervention among women with preterm labour. Women with symptoms of preterm labour (cervical changes and/or painful contractions) were included. During a first period (control group, n=323), women were treated with the usual treatment (e.g. bed rest and tocolysis). During the intervention period (n=309), psychological support was offered in addition to routine care. Baseline characteristics were similar between groups. The results showed that women treated with a psychological intervention had a reduced risk of preterm delivery (12.3%), compared to 25.7% in the control group. We will now investigate the pathophysiological mechanisms that may explain the effectiveness of the intervention, including a possible decrease in the blood level of stress hormones (e.g. CRH) following psychological support

**741 Design of a Randomized Controlled Trial to Evaluate the Effect of a Psychological Intervention to Decrease the Risk of Preterm Birth**

*Michel Boulvain (Switzerland)*

The results of the study conducted by N. Mamelle are very promising, but bias cannot be excluded, due to systematic differences between women treated before and after the implementation of the intervention. The objective of our study is to confirm these results by a randomised controlled trial. Women admitted with preterm labour before 34 weeks (or before 32 weeks in case of twins) will be eligible. Consenting women will be randomised by opening an opaque, sealed envelope containing the allocation to one of the following groups: (1) psychotherapy in addition to usual treatment or (2) usual treatment alone. The primary outcome measure is delivery before 37 weeks (before 34 weeks in case of twins). Other outcome measures are delivery before 34 and 32 weeks, and indicators of neonatal morbidity. The analysis will be conducted following the intention-to-treat principle, i.e. including all women in the analysis. We will report relative risks and their 95% confidence interval, adjusted for the inherent correlation in the neonatal outcomes between twins, if appropriate. Using a time-to-event analysis, hazard ratios will also be calculated. In this analysis, women with a medically indicated elective preterm delivery (e.g. preeclampsia) will be considered as observations censored at the time of delivery and the other women will be censored at 37 weeks. A sample size of 334 women (167 per group) is needed to be able to demonstrate a reduction of preterm delivery from 25% to 12.5%.

**742 Psychotherapeutic Intervention**

*Zarina Qayoom, Dominique Magnenat, Francisco Palacio-Espasa (Switzerland)*

The objective of our study is to evaluate if a psychotherapeutic intervention in women with preterm labour reduces the risk of preterm delivery. The psychotherapy framework is based on the model of the mother/ baby psychotherapy (Palacio), adapted for pregnant women. This intervention gives a meaning to psychological conflicts not yet elaborated (present or past traumatism or an history of pregnancy complication, including pregnancy loss). If repressed, these conflicts may be the cause of

anxiety and contractions. The psychotherapy focuses also on the somatic and the psychological aspects of the pregnancy. The main topics are: the desire of a child, and the ambivalence linked to it; the wish to become a mother, and the fear of incompetence to become a good mother, the difficulty to imagine herself as a mother, and her relation with her own mother; incomplete grief process following a bereavement due to an unfavourable outcome of a previous pregnancy. Women randomised in the psychotherapy group have a standardised clinical interview, adapted for the pregnancy, followed by a therapy focusing on aspects identified during the initial interview. After discharge from hospital, women are followed-up as outpatients, with a frequency adapted to the needs, until the delivery. Clinical cases and their follow-up will be presented. To date, 48 women were included, of whom 29 already delivered. Among them, 9 delivered before 37 weeks of gestation. These first results show the feasibility of the study and encourage us to continue the recruitment until reaching the planned sample size.

**743 Parental Stress experienced during the Neonatal Period and its Implications on the Intergenerational Transmission Attachment Representations**

*B. Pierrehumbert, Carole Muller-Nix, Margarita Forcada-Guex, Ayala Borghini, Francois Ansermet (Switzerland)*

Objectives: Parents of very and extremely premature infants can experience important stresses in the neonatal period; we raised the question whether intergenerational transmission of attachment representations (internal working models of attachment, IWM) could be altered by the presence of important parental stress. Procedure: When their children were respectively 6 and 18 months of corrected age, mothers of 38 preterm infants (GA<34 weeks) and of 20 full terms responded to a clinical interview about the representation of their infants (Working Model of the Child Interview, WMCI), and filled in the Perinatal Posttraumatic Stress Disorder Questionnaire (PPQ). At 45 months, children completed the Attachment Story Completion Task (ASCT), coded with the Düsseldorf coding procedure, providing an index of attachment security. Results: Preterm children's representations proved to be less secure than those of full terms. A significant correlation was found between mothers' and children's representations, in the population of full terms only. Maternal stress had an effect on children's representations, in the population of prematures only. Conclusion: These results suggest that intergenerational transmission of IWM may be altered by the presence of parental stress. In a population of children born at-risk, the influence of parental IWM on children's representations may be overwhelmed by the presence of parental stress. Early intervention with the parents aimed at alleviating stress may be important to reduce the risks for children to develop insecure models of attachment.

**744 Biological and Socioemotional Risk Factors and Later Representations of Attachment in Prematurely Born Children**

*M. Ibanez, M. Iriando, P. Poo, M. Alberdi (Spain)*

Objective: to explore the influence of child and mother early risk factors during infant period on later attachment representations using children's narratives in premature birth context (VLBW<1500g, GA<34). The premature birth influence many developmental pathways, contrasting results of previous studies with prematurely born infants show the importance of further explorations. Procedure: In a longitudinal study on 53 VLBW<1500g born in Sant Joan de Déu hospital in 1996-97-98 without sequel, the perinatal biological risk, maternal stress during premature's first year of life ("R" Interview), weigh and size, feeding problems (Symptom Check List) at 30 month old, verbal and performance skills (EDEI) and narrative's attachment characteristics (Attachment Story Completion Task) coded with Düsseldorf, and CCH- Lausanne coding procedures at 6 y.o. were evaluated Resolution of stories and narrative coherence were specially considered. Results: In preliminar analysis of data feeding problems in infancy were related narrative's Insecure and Disorganized characteristics at school age and the VLBW show lowest narrative's resolution capacity that NBW at 6 y.o. Discussion: We expect to precisely more this interesting relationship between infancy risk factors as feeding problems that involve early relationship circumstances and low resolution capacity in narratives in school age. Interpretation of these data will refer to Stern's concept of pronarrative envelope

**745 Attachment Patterns and Risk Factors in Adoption**

*B. Ongari, Francesca Tomasi (Italy)*

Objective: The literature show that risk factors in the adoptive parents-child relationships may be connected with the characteristics of the attachment patterns, both of the adults and of the children. The aim of the present study was to explore the influence of age at adoption and the effects of pre-adoptive experiences on later children's internal working models of attachment (IWM) as well as the mediating role of adoptive parents' representations of parenthood and of their representations of themselves as caregivers. Procedure: 40 adoptive parents and children will participate (study in progress). Attachment representations of children 3-6 years old are been assessed using the Attachment Story Completion Task (ASCT), while the children more than 7 years are administered the Separation Anxiety Test(SAT) . At the same time, parents' representations of parenthood and of themselves as caregivers are collected through the Caregiving Interview. The type of adoption (domestic or international) are considered (mean adoptive age: respectively 25 days and 27 month). The effect of age of adoption and of the kind of pre-adoptive experience on later IWM (assessed with the ASCT) will be evaluated, as well as the possible mediating role of adoptive parents' representations of parenthood and of themselves as caregivers (Caregiving Interview). Preliminary results highlight the reciprocal influence of adoptive parents' and children's attachment representations.

**746 Obesity in Young Children: Perinatal Events, Attachment Representations, and Behavior Problems**

*F. Zigante, M. Macarelli, B. Beauquier-Maccotta, Bernard Golse (France)*

Objective : to explore the influence of infant-mother's early interactions and perinatal events, especially separations, on the development of children at risk for obesity. Procedure : 25 obese children or at high risk of obesity were proposed the Attachment Story Completion Task (ASCT) coded with the Lausanne coding procedure, and family drawings. Their parents were interviewed about their family situation, children's early development, perinatal events, school and life events; the Child Behaviour Check List (CBCL) and the Toronto Alexithymia Scale (TAS 20) were filled in. Results: preliminary results show that these children have been exposed to a relatively high frequency of separations during infancy and, at school age, their narratives show a high level of reactivity in stories involving the figures' separation. Discussion : difficulties to cope with separation seems to be a prominent issue in these children's representations and this may orient intervention.

**747 Mental Health and Neonatology: Promoting Emotional Relationships**

*Filipa Sobral, Alexandra Barros, Teresa Goldschmidt (Portugal)*

The aim of the mental health professionals in the NSCU is to promote a healthy relationship between parents and babies, in order to reduce the impact of physical and emotional consequences of prematurity or congenital disease. The newborn is a biopsychosocial being and we use a positive approach, focused on individuality and capacities, instead of a negative approach, based on incapacity and pathology. In order to promote affective links between parents and their babies, we try to meet every family, distinguishing those that have a normal reaction to the situation from those presenting a potential pathological reaction that might endanger baby's development. For some families just an informal support is enough, requiring short time to talk about their normal anxieties and fears and about their baby's clinical evolution. But in some cases we deal with families that require a more regular and intensive support because they are overwhelmed with anguish and/or because the bonding relationship with their baby is at risk. We follow the Touchpoints Model of Prof. Brazelton, trying to anticipate the different steps of hospitalization and of development. Adaptation seems to be easier when parents are aware, in advance, of the possible "ups and downs" of the baby's clinical situation. This approach also intends to help parents to discover their baby, allowing them to understand better their behavioural cues, thus enhancing the conditions for a better attachment between parents and babies.

**748 The Neonatologist in the Pre-term or High-risk Newborn Care Team**

*Lincoln Justo Silva (Portugal)*

The first step on caring a newborn concerns to decisions that are taken during foetal and neonatal life. Nowadays, we have an accelerated technological evolution and so medical science has

sophisticated ways to anticipate problems and maintain survival in a way that was not possible in recent years. Identifying foetus and newborn's best interest is not always an easy task. Sometimes the expectations generated by a highly desired baby doesn't allow parents to foresee future problems in a clear way. Assess the viability of a VLBW newborn, resuscitate in the delivery room, decide not to intervene or suspend a procedure in Intensive Care constitute periods of high anxiety and concern. Nowadays, Neonatal Special Care Unity is a place of sophisticated technology. Therefore, the environment surrounding the baby is not always a warm, welcoming one. However, care professionals and, in particular, neonatologists, must also care for the emotional aspects that surround the disease, the pain and, sometimes, the death. The neonatologist has a central place in the team, because of decisions taking process (not always simple), but also because the necessary availability towards the parents, to convey objective but compassionate information, to active hearing and communicating with other health professionals.

**749 Being a Nurse in a Neonatal Special Care Unit**

*Graca Roldofo (Portugal)*

They're small, sometimes very small: they're the pre-term babies. They were born "before their time" (some at 23-24 weeks)...Fragile and defenseless, depending upon the technology to survive, they need all the human warmth that each gesture conveys. Taking care of them is more than a work; it is a challenge to the human capacities that each professional applies in their care. Usually, the nurse contacts first with the father: explains the situation of the baby, prepare him for the surrounding environment. She supports him in the first shock... listens to his doubts, fears... answers cautiously. A baby's photo can be taken for the mother. It is important to minimise the impact of the environment and of the care we provide: intensive care is fundamental for survival, but also has costs for development (the noise, the lights, the manipulation, the painful procedures...). As important as to help the baby to survive is making him survive with the minimum possible sequels. Establishing the relationship/attachment between parents and baby is encouraged. Being available, knowing to listen, understand their fears and difficulties and the aggressiveness sometimes contained in their words and behaviours is important. Helping parents to take care of their baby, give them autonomy and preparing for discharge, is one of the fundamental aspects, in a philosophy of a family-centered care.

**750 Growing Up with a Serious Illness**

*Morse Sue (Australia)*

The trajectory of settling in to the ordinary activity of family and home following the birth of a baby is altered when the infant is discovered to have a serious illness. The need for hospital and medical care necessarily intrudes. Two young girls born were with major congenital upper airways problems, which meant that they could not vocalise. They did not achieve age appropriate developmental milestones. This presentation will explore the way that the therapist facilitated the babies' transition from being a medical patient to becoming an independent self. Their parents were able to feel safe as they discovered more of their own infants' intersubjectivity and development of language. This will be illustrated with video and clinical material.

**751 Social Work in a Neonatal Special Care Unit**

*Laurinda Almeida (Portugal)*

The Social Work, as an integrant part of the team, takes in, attends and psychosocially supports problem-situations, promoting a progressive development of family social competence in managing their everyday life (personal, family, friends, professional, community), preparing them for the return of newborn to Community (home/family/social context), by mobilizing internal and external resources needed for his well-being and intervening in the primary network, making the family the "subject of change".

**752 Transactional Model of Temperamental Development: Evidence from the Relations between Child Temperament and Parental Stress over 5 1/2 Years**

*Anu-Katriina Pesonen, Katri Raikkonen, Kati Heinonen (Finland)*

Parents in modern societies are under various pressures reflected in their experiences of stress. This phenomenon has motivated research in which the effects of parental stress on child developmental

outcomes have become a topic of fast-growing interest. While there is a growing consensus that parental stress is a risk for optimal parenting and child development, longitudinal studies on the effects of parental stress are few. This study tested among 232 mother-child and 105 father-child dyads whether the relations between a global experience of stress in parents (the PPS) and child development (the IBQ and CBQ) could be conceptualized through transactional models of development, assuming that infant temperament would contribute to the increase of parental stress over 5.5 years and parental stress would contribute to the increase of child negative emotionality over 5.5 years. Using cross-lagged path models, evidence was found for both hypotheses, even though the latter, i.e., the effect of parental stress to child temperamental development, was more emphasized, also when parenting styles (authoritative, authoritarian) were adjusted for. The results are discussed with reference to infant and child mental health implications.

**753** **Maternal Stress in Families with Children at Risk for Developmental Delay: Comparisons to Normative Stress Trajectories across the Child's First Three Years of Life**

*Andrea Hart, Lorraine McKelvey, Lauren Barton, Leanne Whiteside-Mansell (United States)*

In addition to typical stressors related to parenting, parents of a child with a delay also experience a stress that is specific to their child's diagnosis and special needs. Using longitudinal data collected through a study of the efficacy of early intervention for low-income families in the United States, the purpose of this study was to examine the development of stress across time while parenting typically developing children and those with special needs. Results suggest that although parenting stress is known to be higher in parents with special needs children, there are few differences in growth trajectories as their children age. They also suggest that parenting stress, although elevated for these parents, appears to be mostly related to the difficulties within the context of interaction and related to concern about the child's abilities. No differences in maternal distress related to the general demands of parenting were evidenced. Implications for interventionists may be related to identification of ways to foster maternal interactions her developing child.

**754** **Reducing Stress in the Adolescent Mother Infant Relationship: A Study at the Cyesis School**

*Vidisha Patel (United States)*

This doctoral study looks at the impact of stress on the relationship between adolescent mothers and their infant children. The mothers completed a ten week stress management program called, Heart Smarts. The effectiveness of the program on reducing stress on the mother-child relationship was assessed through quantitative and qualitative measures.

**755** **Nationwide Treatment System for Substance Abusing Pregnant Women and Families with Infants: Developing a Model Program in Child Protection Field (Federation of Mother and Child Homes and Shelters)**

*Maarit Andersson, Eija Kettunen, Marjukka Pajulo (Finland)*

The s.c. "Holding Tight"-project, financed by the Slot Machine Association, started in Finland year 1998. It is designed to develop a nationwide treatment system for substance-abusing pregnant women and families where there are infant children. The objective of this treatment system are to prevent and minimize fetal exposure to substances by supporting mothers' efforts to stay abstinent from alcohol and drugs during pregnancy, and to enhance the development of "good enough" interaction between mother and child in families where the mother has alcohol or drug problems. The objective is to develop collaborative work between social services and health-care services in meeting these families and in referring them to treatment. The forms of intervention are: residential treatment units (Mother and Child Home), Open Care Units and home visit based intervention. The similar treatment approach is carried out in all of the seven Mother and Child Homes, coordinated by a manager group and developed in collaboration with researchers and child psychiatrics. The core idea in treatment is to create a holding environment at three levels: 1) helping the mother hold the baby and her relationship with the baby in mind, 2) helping the mother's social network and the unit personnel through their actions and through their use of the treatment environment hold the mother in mind, 3) through supervision, research work etc. holding the treatment units by showing

continuous interest in developing the work.

**756 Sustained Infant Withdrawal in Infants Exposed Prenatally to Alcohol**

*Christopher David Molteno, Andrea Hay (South Africa), Sandra Jacobson, Joseph Jacobson (United States)*

Guedeny has proposed that infant withdrawal could be an important symptom in alerting clinicians to the possibility of depression. Infant withdrawal was included in a study of the effects of prenatal alcohol exposure in a cohort from an urban community in Cape Town, South Africa. 159 mothers from the Cape Coloured (mixed race) community participated. Mothers were interviewed about their alcohol consumption using a timeline follow-back approach to determine frequency and amount of drinking on a day-by-day basis. Soci- demographic and psychological correlates of alcohol use were examined. The Alarm Distress Baby Scale (ADBB) of Guedeny and Fermanian, which tests withdrawal behavior was applied at 6.5 months of age. Mother-infant interaction was assessed on video recordings of the mothers and infants during two sessions, free play and infant feeding. A fingerstick blood specimen was taken and examined for the presence of iron deficiency anemia. Prenatal alcohol exposure was associated with infant withdrawal. There was no association between infant withdrawal and socio-demographic factors or maternal psychopathology, including depression. There was a strong relationship between infant withdrawal and mother-infant interaction. Infant withdrawal was strongly associated with iron deficiency anemia. On regression analysis, the effects of alcohol intake and iron deficiency on infant withdrawal remained unchanged, indicating that neither of these factors was mediated by the other.

**757 Behavioral Dysregulation among a Clinical Sample of Drug and Alcohol-Exposed Infants**

*Claire Coles, Julie Kable (United States)*

Behavioral dysregulation in infancy and the toddler period may result in disruption to sleep cycles, feeding, and interactions with others and in further escalation of conduct problems over the course of the lifespan. A clinical sample of infants (n=88) who attended a Fetal Alcohol Syndrome diagnostic clinic were assessed using the Child Behavior Checklists completed by their caregivers and their childcare providers to assess severity of behavioral dysregulation among a group diagnosed with an alcohol- related neurodevelopmental disorder and those who did not receive a diagnosis. In addition, medical data was collected to assess the use of behavioral medications among these groups of infants. The base rate of behavioral disturbance was high among the total sample but infants diagnosed with FASD were not at greater risk. In fact, those not diagnosed were more likely to have clinically significant levels of externalizing problem behaviors. The use of behavioral medication was 8.0% among the total sample and 2.3% were already receiving multiple behavior medications but no group differences were found in medication usage. Clearly, infants with a history of maternal substance use are at high risk for behavioral dysregulation disorders and are in need of targeted interventions to facilitate habilitation in this area.

**758 Magic Mirror Project**

*Sinikka Aulikki Makela (Finland)*

The aim of the 3 year project is to help: -small children who live in families where parents have alcohol problems, -their parents, -support persons and support families, -social workers responsible for organizing support for these families - with the main idea to increase the understanding of the experiences and feelings of children in these families and help the parents and support persons to identify their needs and help them in traumatic conditions. Working includes: -arranging a course for support persons and problem families -giving supervision for support persons -arranging home visits for the problem families. Theoretical background is based on the construct of "maternal reflective functioning" by Fonagy et al. Working method with the parents is based on "Parents First" programme and manual (Goyette-Ewing et al.) For evaluation "Parental Development Interview" is used before and after the intervention and it is linked to the evaluation of the child.

**759 Associations of Maternal Drug Abuse, Mental Representations of Toddlers, Reflective Functioning, and Sensitivity to Toddlers' Emotional Cues: Testing an Attachment Model of Parenting in a Sample of Drug Abusing Mothers and their**

### Toddlers

*Nancy Suchman, Cindy DeCoste, Nicole Schmitt, Linda Mayes (United States)*

To test hypothesized mechanisms of attachment and addiction, we will examine links among maternal drug abuse, representations of child, reflective functioning, and sensitivity to toddler cues. Attachment theory suggests that parent sensitivity to infant cues is critical to development of self-regulation. Misperceptions of cues are thought to be a function of denial/distortion in caregiver representations. Representations are thought to be transmitted across generations because of a caregiver's limited capacity for "reflective functioning" - the ability to recognize thoughts/feelings underlying behavior (therefore restricting recognition of emotional cues). Many abused substances (e.g., cocaine) affect dopaminergic pathways that are also critically involved in caregiver investment in caring for child. Drug abuse may co-opt this endogenous value system such that a competing investment in drugs reduces caregivers' capacity to invest in care of child. Using data collected from 30 mother/toddler pairs, we will examine if: 1) longer drug abuse is associated with a) higher disengagement/distortion in representations (REPS), b) lower RF, and c) lower sensitivity; 2) higher disengagement/distortion in REPS is associated with a) lower RF and b) lower sensitivity; 3) higher RF is associated with higher sensitivity; and 4) effects of a) longer drug abuse and b) distortion/disengagement in REPS on sensitivity are mediated by RF. Measures: Working Model of the Child Interview, Parental Development Interview, NCAST Teaching Scales and Curiosity Box Paradigm, drug use survey.

### 760 **Assessing the Efficacy of an Attachment-Based Intervention for Drug-Dependent Mothers in Improving Maternal Responsiveness to Children's Disengagement Cues**

*Cindy DeCoste, Nancy Suchman, Nicole Schmitt (United States)*

Observations of interactions between drug-dependent mothers and children have shown reduced maternal responsiveness to children's cues. Attachment research has shown that such maladaptive behavior can be detrimental to children's development. It is therefore critical to evaluate the efficacy of interventions that aim to enhance these interactions. We propose a method to examine this in the context of the Mothers and Toddlers Program (MTP) at Yale University. MTP is an attachment-based research intervention for mothers in drug treatment that emphasizes the importance of mother-child synchronous, reciprocal interactions. The NCAST teaching interaction (NCAT; a widely used standardized tool) is used as one measure of maternal responsiveness to children's cues. The proposed study aims to evaluate the effectiveness of MTP in enhancing maternal responsiveness to children's disengagement cues, using three constructs embedded in the NCAT: 1) children's potent disengagement cues (CPDCs), 2) mothers' contingent responsiveness to CPDCs, and 3) mothers' repertoire of responses to CPDCs. The sample will be 30 mother-toddler dyads. Repeated measures ANOVAS will be used to compare pre- and post-: 1) frequencies of CPDCs, 2) ratios of mothers' contingent responses to CPDCs, and 3) number of types of maternal responses per CPDCs. We hypothesize that as maternal responsiveness to CPDCs improves with intervention: 1) CPDCs will decrease, 2) ratio of maternal contingent responsiveness to CPDCs will increase, and 3) mothers' repertoire of responses to CPDCs will increase.

### 761 **Emotional Regulation among Methadone-exposed Infants**

*Trecia Ann Wouldes (New Zealand)*

Emotional regulation was examined in 21 six-month old infants born to mothers on methadone maintenance and 39 non-opioid exposed infants. Observers blind to the study hypothesis coded videotapes of the mothers and infants emotional behaviour during Tronick's Face-to-face Still-face paradigm using the Maternal and the Infant Regulatory Scoring System. Methadone infants spent significantly more time during the mildly stressful Still-face segment attempting to re-engage their mothers in social interaction than comparison infants (41.66% vs 34.79%). In contrast, non-opioid exposed infants spent a significantly greater percentage of time looking at proximal objects (33.53% vs 23.02%). Regression analyses revealed that rather than methadone exposure, a number of infant and maternal factors explained these outcomes. More emotional bids for interaction by methadone infants during the Still-face were linked to two maternal factors, the personality characteristic of Novelty Seeking, and a DSM-III-R diagnosis of amphetamine dependence ( $F(3,56) 7.44, p < .001, R^2 = .29$ ). More time spent looking at proximal objects by the non-opioid exposed infants in the first segment and more maternal years of education were positively associated with the level of time



spent looking at objects in the Still-face. Being born preterm and more maternal attempts at positive engagement during the first segment of the Still-face were negatively related to the time spent looking at proximal objects ( $F(4,55) 8.48, p < .001, R^2 = .34$ ).

**762 Glass Pearl Project**

*Sinikka Aulikki Makela (Finland)*

The project is focused to young "risky parents of babies", who were once children in problematic backgrounds due to their parents' alcohol or mental health problems. When they become parents themselves, the shadows from their past may appear in the form of nervousness, depression or difficulties with the child. The work includes three summer-courses to different groups of these baby families which each continue by several group meetings and a weekend meeting. The meetings include workshops, group discussions, mother-baby- and father-baby groups, play-sessions and creative tasks. The intention of the process is to make the participants look at their past and the problems in the chain of generations and try to make a change. After this process new comparative groups are organized and encouraged to discuss the same themes together. The project gives education and supervision to the parents that are willing to lead these group discussions. Theoretical thoughts are derived from Selma Fraiberg's work, attachment theories and Emde's thoughts of interactional parenthood.

**763 Mother-Infant Group Psychotherapy as an Intensive Treatment in Early Interaction Among Mothers with Substance Abuse Problems**

*Ritva Helena Belt (Finland)*

MOTHER-INFANT GROUP PSYCHOTHERAPY AS AN INTENSIVE TREATMENT IN EARLY INTERACTION AMONG MOTHERS WITH SUBSTANCE ABUSE PROBLEMS Belt R MD Kalliokatu 11 D, 18100 Heinola, Finland ritva.belt@phnet.fi Punamäki RL PhD Department of Psychology University of Tampere, Finland We present a method of brief dynamic mother-infant group psychotherapy among mothers with substance use problems. In this therapy substance abuse treatment is linked to mental-health and parenting interventions. The focus is to prevent disturbances and promote the welfare of the mother-infant relation in this risk group. The clinical material consists of 16 mother-baby dyads in six psychotherapy groups, that met weekly through half a year from pregnancy to post-partum. The therapy process consisted of 20-24 sessions, with the duration of three hours. The basic of the therapy is to offer mothers experiences of caring and loving, which they, in turn, are expected to give to their babies. We analyse whether "the group as mother" can provide the mothers compensatory new early experiences and a safe place. The experiences indicate that in the therapy the mother gradually finds the enjoyment with her baby. The analytic group therapy seems to be a promising therapy form for those substance-abusing women, who are able to commit to the outpatient care and network and are motivated to understand the causes for their drug-dependence. The groups may also act as a diagnostic assessment method to find out problems and dynamics with the mother, with the baby and with their early interaction.

**764 Breaking the Cycle: Substance Misuse and the Mother-Child Relationship**

*Margaret Leslie, Mary Motz (Canada)*

This workshop will consist of two paper presentations and one video presentation which will examine the impact of substance misuse on parenting, mother-child interactions, and child development. The papers and video will focus on children from the prenatal period to 6 years of age whose mothers attended Breaking the Cycle, an early identification and prevention program for pregnant and parenting women who are using substances and have young children. The first paper will discuss the influence of substance misuse on the development of regulation and attachment patterns. The intergenerational repetition of loss and trauma experiences will be identified as critical factors underlying the transmission of regulation, attachment, and substance use problems. In the video, three mothers in recovery from substance misuse describe their experience of growing up with parental substance misuse. The second paper will present findings from 55 mother-child dyads drawn from the Breaking the Cycle program and examine: 1) the caregiving context of these families at-risk; 2) the association of mother-child separations with the development of substance-exposed children; 3) the association of the quality of mother-interactions with child development.

**765 FAS Europe**

*Viviane Hengen (Luxembourg)*

FAS EUROPE is a voluntary organisation whose purpose is to enhance the dignity, respect and self-determination of the person with FASD throughout the course of the disease and to improve the quality of life, the care and treatment of people with FASD. The aims of FAS EUROPE are: 1. To represent the interests of people with FASD their families and their carers towards the European institutions and the Council of Europe. 2. To act as an interface for the exchange of information between FAS EUROPE and FAS associations and European structures. 3. To develop and defend consensual policy statements on European issues of interest to people with FASD. 4. To promote by co-operation the support of people with FASD. 5. To raise awareness of FASD by the medical profession, paramedical organisations, social services and the European Commission and European Parliament. 6. To develop models for improved care of people with FASD. 7. To promote the training of personnel caring for people with FASD. 8. To encourage and support research and the advance of knowledge into the cause, early diagnosis, treatment and prevention of FASD. 9. To promote world-wide co-operation with other organisations having the same or similar objectives .

**766 Long-term Outcome of Children with Fetal Alcohol Syndrome: Psychopathology, Behavior, and Intelligence**

*Hans Ludwig Spohr (Germany)*

Steinhausen HC, Spohr HL. Department of Child and Adolescent Psychiatry, University of Zurich, Switzerland. Within an interdisciplinary research project, the long-term outcome of children with fetal alcohol syndrome was studied. Methods for the assessment of psychopathology, behavior, and intelligence included psychiatric interviews, behavior checklists for parents and teachers, and intelligence tests. The children were assessed during preschool age, early school age (6 to 12 years), and late school age (> or =13 years). An excess of psychopathology, (including hyperkinetic disorders, emotional disorders, sleep disorders, and abnormal habits and stereotypes) with a strong persistence over time was found. Cognitive functioning was marked by a large proportion of mentally retarded children and also did not change considerably over time. This long-term outcome study reflects the handicapping effects of fetal alcohol syndrome.

**767 Fetal Alcohol Spectrum Disorders: Teratogen and Neurotoxicity**

*Damien Subtil (France)*

Les conséquences de l'alcoolisation maternelle sont cliniquement repérables à partir de la consommation quotidienne de trois verres de boisson alcoolisée. Ces conséquences sont souvent méconnues, d'une part par le fait que le diagnostic clinique du syndrome d'alcoolisation foetal n'est pas toujours posé, d'autre part parce que ses conséquences neurologiques n'apparaissent que tardivement (déficit cognitif, troubles de l'attention, instabilité). En dessous de ce seuil de trois verres par jour, il n'est pas possible de conclure à l'innocuité de l'alcool, dont la toxicité neurologique est par ailleurs certaine à doses élevées. Comme dans d'autres pays, l'information de toutes les filles et de toutes les femmes devrait passer par un étiquetage des bouteilles contenant de l'alcool, bien en amont de la grossesse. Compte tenu de la toxicité de l'alcool, seule l'option « zéro alcool » pendant la grossesse est raisonnable. Un interrogatoire et une information systématiques en début de grossesse sont nécessaires. La prise en charge des femmes enceintes qui s'alcoolisent de manière excessive est difficile et nécessite un travail en réseau où l'obstétricien devrait avoir une part importante. Celui-ci tentera de convaincre la mère de l'intérêt qu'il y aurait pour elle et pour son enfant à cesser de boire et devra laisser progressivement place à une attitude - volontairement positive - de soutien à une femme et un enfant en réelles difficultés. Des succès peuvent être escomptés pour ces familles en grande difficulté.

**768 Drug Abusing Mothers Experiences of Everyday Life with their Infants**

*Minna Sorsa, I Kiikkala, P Åstedt-Kurki (Finland)*

Background: Drug abuse is a growing problem in western societies and more babies are being born to drug-using women at the same time as higher proportions of children are taken into custody by child protective services. Mothers with drug abuse and mental health problems seem to demonstrate a complexity in their experiences as caregivers and in their relationship with their infants.

Objective: The aim of the study was to explore the drug-abusing mother's subjective experiences of

everyday life with their infants and what this could imply to care providers. Method: A qualitative case study approach was used as described by Yin (1991) to investigate any phenomenon within its real-life context. Four interviews were conducted using Kvale's (1996) qualitative interview method. Data was analyzed and categorized using standard qualitative methods. Results: One of the mother's three children was taken into custody after a long period of drug abuse. Even though the mother was depressed and considered committing suicide, she insisted on wanting to care for her children. The everyday life contained normal as well as chaotic elements. The mother tried to hide the troubles as long as possible. Finally her children were a driving force in her to seek for help into their situation. Conclusion: Understanding of the mother's everyday life aspect can reveal new elements that care providers should recognise in the care of the infants and mothers in a context of drug abuse. Listening to the mother's perspective is a tool in building trustful relationships in order to help.

**769** **Supervision and Training in Child Care Settings: A Comparative Study of Reflective and Traditional Methods and their Effect on Caregiver Insightfulness**

*Elita Amini Virmani (United States)*

The goal of this study was to explore the effects of reflective and traditional supervision and training on caregiver insightfulness. This quasi-experimental study used a mixed methods design utilizing both qualitative and quantitative methods. Caregiver insightfulness (Koren-Karie et al., 2002), which involves the ability to see from the child's point of view, was assessed at two time points with 21 new caregivers at 2 university-based child care sites. Results showed that increased scores in several components of caregiver insightfulness over a period of approximately 2 months were positively associated with reflective supervision and training. These findings suggest that encouraging caregivers to reflect on their interactions with the children in their care fosters caregivers' ability to see from the child's perspective in an open and accepting way.

**770** **Infant Observation in Child and Adolescent Psychiatry Training**

*Maria Gonzalves Cordeiro, Isadora Santos Pereira, Ana Cardoso Pereira (Portugal)*

The Seminar of Observation of Babies was introduced into the training curriculum for Child and Adolescent Psychiatrists of a Portuguese Central Paediatric Hospital in 2004. The method of Infant Observation was conceived in 1948 by Esther Bick; since then it has been subjected to theoretical developments and to adaptations to different training, clinical and research contexts. Still, the inclusion of Observation of Babies in the training curriculum for Child and Adolescent Psychiatrists is a pilot experience. It consisted of: an observation of the feeding moment and mother-child free play, at home; the writing of a detailed report of the observation; the presentation and discussion of the report at an observers discussion group, with specialist supervision. Two clinical vignettes drawn from the observation protocols presented at the seminar illustrate the procedure applied as well as authors' understanding of the observed phenomena. In spite of being a recent experience, it seems possible to foresee some advantages in the training of the Child and Adolescent Psychiatry trainees that have attended the Seminar. It addresses the importance of the practitioner's subjective experience in his relation with the patient. Furthermore, it provides an opportunity to understand the way in which the subjective interaction between both determines the character of the therapeutic experience.

**771** **Infant Psychiatric Outpatient Unit in Tampere University Hospital**

*Mantymaa Mirjami, Anne-Mari Saviluoto, Kaija Puura, Palvi Kaukonen, Tuula Tamminen (Finland)*

This study describes the assessment and treatment processes at the Infant Psychiatric Outpatient Unit of Tampere University Hospital as well as infants and their families attending the unit during 2004-2005. We work with children aged 0-3 and their families as well as pregnant women at risk for difficulties in mother-infant relationship. The clinic is a part of specialised services which means that in order a family to attend the clinic a referral is needed. Our multidisciplinary team includes a social worker, a psychologist, a psychiatric nurse and a child psychiatrist, all trained to parent-infant work. The unit was established 1997, but during the last few years, an effort to systemise the assessment as well as the treatment processes has been made. During the assessment period we make home visits, assess and observe the child, child-parent relationship and family, and DC:0-3

diagnosis is formulated. The therapeutic goal is to enhance, strengthen and treat the parent-child relationship as well as family relationships. We also co-operate with other services. In 2004 47 new families were referred, including 5 (11%) expecting families and 25 (53%) families with an infant under 12 months. During 2005, by the end of August, 35 new families have attended the unit, including 19 (54%) families with infants under 12 months. Roughly third of the families are referred from adult psychiatric units. Processes and difficulties in making DC:0-3 diagnosis as well as treatment processes regarding different diagnostic groups will be presented.

**772 The Collaborative Peer Supervision Group Project: A Continuing Education Model to Promote Professional Competence**

*Michael Thomasgard (United States)*

THE COLLABORATIVE PEER SUPERVISION GROUP PROJECT: A CONTINUING EDUCATION MODEL TO PROMOTE PROFESSIONAL COMPETENCE Michael Thomasgard (United States), Janece Warfield (United States) This poster will review the development of our Collaborative Peer Supervision Group (CPSG) Project that is designed to promote regular, relationship- based, reflective supervision for infant mental health clinicians. We outline the origins of our CPSG model; highlight the importance of supervision of one's professional competence; summarize our Maternal and Child Health continuing education grant and share lessons learned from our cumulative experience with the CPSG model. Our three-year Federal Maternal and Child Health Training Program Grant will allow us to: 1) foster the development of ten, case-based, interdisciplinary, continuing education CPSGs in Illinois, Indiana, Michigan and Ohio (four Midwestern states within the United States); 2) improve the clinician's ability to assess, treat or appropriately refer infants and young children with developmental variations, problems and disorders of mental health and 3) promote further expansion of similar groups via the World Wide Web. Our project's Web site [www.oaimh.org](http://www.oaimh.org) provides detailed, downloadable documents that describe every step in forming, sustaining and evaluating a new CPSG.

**773 Keeping the Infant in Mind in a Child and Adolescent Mental Health Service - A Unique Australian Infant Mental Health Program**

*Rosalie Birkin, Campbell Paul, Karen Gaunson, Nichola Coombs (Australia)*

In Australia, Child and Adolescent Mental Health Services (CAMHS) are available free of charge, to all under 18 year olds and their families. For the past seven years, a specialist Infant Mental Health Team has been operating within Alfred CAMHS, providing a wide range of services to the "under three" population within the catchment area. The Infant Mental Health Team is made up of seven clinicians from a range of disciplines – psychiatry, psychology, psychotherapy, speech pathology, occupational therapy and nursing. This is a unique development within Australian CAMHS. The poster will be an interesting and engaging presentation of photographs, drawings and text, that illustrates the development of the program, the composition of the team, the contribution of disciplines, the clinical assessment process used - including the use of one-way screen multi-disciplinary assessment sessions; information regarding the presenting problems of infants seen within the program, the formulation and diagnosis process within the team structure, treatment options, research and professional development activities, consultation projects and links with the community and the state- wide service system.

**774 Homecare in the Child Psychiatric Outpatient Clinic of Tampere University Hospital**  
*Anitta Ylijoki, Sari Miettinen (Finland)*

The Homecare unit in the Tampere University Hospital child psychiatric clinic started in 1999. The Homecare unit is a multidisciplinary team including a doctor specialized in child psychiatry and four nurses. Psychologist and social worker are available when their services are needed. The child psychiatric Homecare unit focuses on the assessment and treatment of developmental, emotional and behavioural problems in young children in their own environment. The Homecare unit also takes care of families in acute psychological crisis. The Homecare unit gets referrals from public health care centers, family counselling clinics and Tampere university child psychiatric clinic. The aim of the homecare is to help the child and his/her family in his/her own environment. The homecare is a unique dialogue between the child, his/her family, his/her network and the homecare nurses. The aim of dialogue is to find common understanding of how to help the child, family and

the network in everyday life. The nurses support child's and his/her family's own abilities and helps them to search the possibilities of their own growth within the dialogue of the co-operative relationship.

**775 Creating Healthy Bonding Experiences using Multiple Modalities in a Group Setting with Mentally Ill Parents**

*Pratibha N. Reebye, Winnie Kwok, Atefeh Soltanifar, Annie Wolverton (Canada)*

Introduction: This bonding group, focusing on mentally ill parents and their infants, is based on paradigms of attachment theory and experiential techniques using multiple modalities for enhancing bonding. Method: Parent-infant dyads were recruited through a tertiary care center. Parents were required to bring their infants to the group, and partners were encouraged to attend too. Bonding exercises were taught and facilitated by an infant psychiatrist with a high ratio of therapists to participants. The group ran in two series with four 2 hourly sessions. The major focus was teaching parents to identify baby's cues, positioning, holding, and infant massage. Parents were given a written "Toolkit for bonding" containing the group's key concepts. A booster session was offered for one three hour session. Results: All twelve dyads expressed improved confidence in their parenting abilities, interacted more appropriately with their infants, and produced more balanced narratives about their own parents. All infants had improved regarding behavioral and attentional self-regulation. Discussion: Mentally ill parents and their partners benefit from specialized attention with respect to bonding with their infants using multiple modalities.

**776 Development of a Perinatal and Infant Mental Health Service and Training of Mainstream Clinicians from Novice to Expert**

*Michelle Ellen Haling, Ursula Ann Hopper (Australia)*

In the South West of Sydney, Australia, the Integrated Perinatal Care (IPC) initiative, which received short term mental health funding, has resulted in the establishment of a Perinatal and Infant Mental Health Service (PIMHS). The staff of this service is not only responsible for providing a clinical service but are also responsible for the provision of education and clinical supervision to mainstream staff. What is different about this education and supervision is that perinatal and infant mental health are the core components and the main focus. The consideration and inclusion of Infant Mental Health by staff in mainstream maternity and child and family services forges a new dimension and poses new challenges for perinatal services in Australia. Conversely it poses a new dimension to care and new challenges for mainstream staff. Education has been fundamental in informing staff of why the poor mental health of the mother has long reaching and profound effects on her infant. To ensure that staff are receiving relevant and appropriate training to support perinatal women a range of educational packages have been developed by staff within the PIMHS service. Senior clinicians of this service have accessed clinical supervision training and in turn are providing supervision to the staff from maternity and community based services. The service structure, education provided and training packages which have been developed, the challenges encountered in implementing and sustaining relevant education and training will be discussed in this workshop.

**777 Utilizing a Graduate Social Work Field Education Unit to Provide Infant Mental Health Services: A Community Based Collaboration**

*Ana Leon (United States)*

This workshop will present a University-community collaborative, model that integrates graduate Social Work field training with service delivery to children and families. In its fifth year the field unit to date has received \$442,880 in funding from the local county and has expanded to include services to infants and their families. Drawing from Family Support Model principles the field unit allows Social Work interns to collaborate with other community "partners" to integrate services and address service inequities faced by children under five and their families. Services provided address two major goals: (1) Enhance/improve the Parent/Caregiver-Child Relationship and (2) Improve the client/family environment. Using various assessment tools to include the DC-0-3 assessment, the PIR-GAS and the Collaborative Assessment of Life Functioning (CALF), social work students will assess infants and their families. Other services will include Parent-Child therapy, play therapy, individual and family counseling. Additionally, the unit will provide training workshops to local day care centers and head start programs. Workshop discussions will focus on (a) description of the

community-university collaborative model, (b) identification of program components for a successful university-community collaboration, (c) educational and service delivery challenges and opportunities, (d) information on how the unit benefits geographically and racially diverse and underserved infant, toddler and family populations and (e) program and funding considerations for replication of the unit.

**778 Holding onto the Baby when the Bathwater is Gone**

*Heath Townsend (Australia)*

Western Australia is the largest and most isolated state in Australia. Its capital Perth is one of the most isolated capital cities in the world. When Perth's Family Early Intervention Program was closed down two years ago, Infant Mental Health lost a dedicated service. An under five's reference group in the metropolitan Health Department has since undertaken the task of creating an expertise within the existing Child and Adolescent Mental Health Services. A dedicated service of teaching infant mental health does not exist within Western Australia. Infant Health needs struggle for recognition in a health system currently dominated by the needs of self harming and suicidal adolescents. Our reference group is in the process of building expertise and confidence in its members who are part of the broader service addressing the needs of 0-18 year olds. Our plan is: - meeting regularly to outline service needs and to share experience and expertise - liaising with infant health services within the community - inviting experienced child health educators and psychotherapists to educate and advise the group - setting up training programmes for the group in infant observation - group members videotaping Parent/Infant interactions when they home visit or see clients at their clinic. The group will help review these interventions and provide regular supervision.

**779 Intense or Spaced Learning about Mental Health Care for Midwives**

*Sandra Elliott (Great Britain)*

Mental health professionals are not able to meet all the demands for treatment of common mental disorders. Treatment is particularly important for families in the perinatal period. It is therefore logical to look to professionals already in frequent contact with childbearing women to implement first-level care in stepped-care models for depression and anxiety. To achieve this they require training in recognition and understanding of disorders, appropriate interventions, professional boundaries and referrals. It was based on Diana Riley's lecture series for midwives and the Sainsbury Centre for Mental Health training programme for health visitors. These were condensed into four supported learning sets and two group sessions. In the meantime the Confidential Enquiry into Maternal and Child Deaths (CEMACH 2005) identified psychiatric causes as the leading cause of maternal deaths in or after childbirth. Busy, understaffed maternity units looking for a cost effective way to deliver mental health information wanted the training condensed into a single study day. This paper will briefly summarise the results from pre to post comparison of midwifery attitudes and confidence, measured by a questionnaire, and midwifery practice of recording mental health information in maternity notes at St. Thomas' Hospital, London. The participants will then be invited to discuss the benefits and disadvantages of providing mental health training in a single day or over a period of self-study with facilitated peer supervision groups.

**780 Mental Health Training Programs for Primary Care Professional within Multidisciplinary Network: Needs and Problems**

*Catherine Isserlis, Nine Glangeaud-Freudenthal (France)*

Mental health prevention by primary-care professionals requires that they be trained in how to evaluate types and severity of psychological difficulties and psychopathologies, how to screen for risk factors for early postnatal depression and how to facilitate the relationships between primary and secondary care professionals. Mental health professionals of the Francophone Marce society (SMF) translated the Marce Resource Pack into French during regular meetings for two years. The manuscript has also been discussed in a midwife working-group of the SMF. Discussions were related not only to problems of translation but also to differences in the mental health care systems and theoretical approaches to mental health care. Adaptation, or "localization", of this instrument was required in view of differences between the two countries in the timing of systematic follow-up of mothers and babies in postpartum (in France mostly at community consultations rather than

'home visits') and in community health care resources (geographical distribution by 'sectors' and type of care-givers-for example, there are no 'Health visitors in France). The French version of the Marce Resource Pack includes practice exercises and training that focuses on a behaviourist and patient-centered approach to specific targets; this approach is not common to France, where psychoanalysis is very influential. "Localizing" the pack raised further questions: What message we wish to give local primary care-givers? Do we need to add specific information? Which category of primary-care professional is most in need of training to aid them in providing prevention services in mental health?

**781 Responsive Teaching: An Evidence Based Intervention Curriculum for Infants and Toddlers with Developmental and Social Emotional Needs**

*Gerald Mahoney, Frida Perales (United States)*

The purpose for this workshop is to provide awareness level information about the objectives, instructional strategies, intervention and planning procedures as well as evidence for the effectiveness of Responsive Teaching, a newly developed Relationship Focused early intervention curriculum. This curriculum is designed to address the developmental and socio-emotional needs of children at-risk for problems in early cognitive, communication or socio-emotional functioning. Participants will be provided a description of the five components of this intervention model. This includes (a) the nineteen pivotal intervention objectives the 66 Responsive Teaching strategies that are the cornerstone of this curriculum; (c) the 135 intervention topics that can be used to help parents reconcile Responsive Teaching strategies with their own personal views about how to help their children develop; (d) guidelines for conducting intervention as well as observations of two sessions to illustrate how these guidelines look in practice; and (e) a computerized program to plan and track Responsive Teaching intervention sessions. This presentation will include videotape examples of intervention strategies, power point overheads as well as handouts. One thirds of this session will be devoted to participant discussion on practical issues related to implementing this intervention.

**782 Babies Books: An Access to Culture for Babies? Or An Access to Babies for their Family and Community?**

*Francine Couetoux, Laurence Camon Senechal, Michele David, Marie Garrigue Abgrall, Didier Rabain (France)*

We are a pluridisciplinary team, and we receive in a drop-in clinical program parents and their babies, two hours, three times each week. We work in a care unit: Unite Petite Enfance et Parentalite, a 0-3 infant psychiatric unit, that is a part of the Infant and Adolescent Psychiatry Service of Professor Cohen at Salpetriere Hospital in Paris. We will present a video fifteen minutes long filmed during this clinical activity. It presents parents with their babies and professionals and shows the interest of using books for babies. Our project was not only to support the development of language but also to enrich the interaction of the babies with their parents and to open them to culture. The second objective is to allow for an access to the representations of the baby before he is able to use spoken language. We will develop these different aspects of our clinical work with baby books: It will permit cognitive development, stimulation of a mediated proximal corporal relation, conjoint attention, communication and language. It will introduce narrative language and support linguistic interactions in a multilingual environment. It will help in the future integration of the child in the school community, culture and knowledge. Books for babies will also stimulate the internal imagery in babies and give us an access to these representations. Books can also become an easy transitional object for integration in the community.

**783 Representations and Interactions between Parents and Children Born with a Cleft Lip (and Palate): An Intervention Program**

*Daliah Lagonico, Judith Hohlfeld, Blaise Pierrehumbert, Josee Despars, Francois Ansermet, Carole Muller-Nix (Switzerland)*

The purpose of this study is to evaluate the specificity of the relationship between parents and children born with cleft lip (and palate): characterizing parental representations, their evolution and their influence on child-parent interaction. Another objective is to evaluate the possible modification of these representations and parent-child interactions by a light psychological

intervention around the time of the operation(s). Families (N=30) with a child born with a cleft lip (and palate) are interviewed before the operation (even during the pregnancy whenever possible) and after the operation(s) (when the child is one year old). These semi-structured interviews last approximately an hour and a half and are videotaped. A parent-child interaction is also videotaped at 2 months and at 12 month old (Strange situation). Half of these families are randomised to receive a psychological guidance (i.e. 2-3 sessions in which parents are invited to comment tapes with parent- infant interactions). A non-clinical control group (N=15) is also included in the study. According to the first clinical observations, parents are clearly experiencing ambivalence, which is expressed either by a poor emotional investment or on the contrary by over-investing their child. Psychological guidance (2- 3 sessions) helped parent to improve the quality of the representations they have of their child and the parent-infant interaction. Data collection is in progress. Intermediate quantitative analyses will be presented.

**784** **Diagnosis about Attachment Relationships between Mothers and Children in Adoptive Families during the First Eight Months of Adoption**

*Cecilia Serena Pace, Serena Messina, Giulio Cesare Zavattini, Alessandra Santona (Italy)*

This paper is about a study regarding the development of attachment bond in the relationship between adoptive mothers and children adopted in later childhood aged 4 to 7, with a past of maltreatment and neglect. This study will be a brief-longitudinal research consisting of two measurements: the first within two months from adoption, the second six months later. In both the sessions we administered the Separation/Reunion Procedure aimed at identifying the attachment behaviour of the child to his/ her caregiver. During the first phase the mothers were administered the Adult Attachment Interview; in the second phase we administered to the children the Manchester Child Attachment Story Task, a new method of evaluating attachment representations in young school-age children. At the moment the experimental sample is made up of 11 adopted children and 9 adoptive mothers. In the first step we found a majority of children with an insecure attachment behaviour in comparison with a prevalence of secure attachment models in their mothers' AAI. In the second step, on the other hand, we observed an increased presence of secure attachment representations in children adopted by mothers classified as secure in the AAI. Our first results seem to suggest that attachment internal working models could be transformed. Late-adopted children show insecure and disorganized patterns of attachment at the beginning of adoption but are able to internalise a more coherent and secure representation of attachment relationships after they have experienced warm and sensitive care with adoptive mothers.

**785** **A Description of a Mother-Baby Psychotherapy Group from the Point of View of Group Dynamics and Attachment Theory and Family Therapy**

*Sirpa Behm-Kostiainen, Jaana Kuivalainen, Ritva Helena Belt (Finland)*

The aim of the study is to describe the progress of a mother-baby psychotherapy group. We investigate the therapy from three angles: 1 from the perspective of group dynamics; 2 from the perspective of attachment theory; 3 from the perspective of family therapy. The group was formed as a result of cooperation between the children's psychiatric clinic of the university hospital and the city's child protection unit. The patients were sent from the adult psychiatric unit and also from the private sector. The group began with four dyads, one of which interrupted the treatment. The group gathered for 2.5 hours a week attending a total of 30 sessions. In addition opportunities were offered outside the group for dyad or family meetings. However, this opportunity was rarely used. There were two nurse- psychotherapists in the group. Conclusions In the mother-infant psychotherapy group the peers provide the mothers a possibility of a greater therapeutic identification with both their own baby and other mothers. We noticed that the connection between mothers and children improved. The mothers seemed to become more tolerant and understanding with regard to both themselves and to the children's fathers. They also found it easier to seek and accept help. Nevertheless, over the sessions where mothers remained concerned about their family life situations. This led to the reflection that it would have been beneficial to work towards whole family meetings and to include the father as part of the care process.

**786** **A Research Study in the Process of Change in Parent-Infant/Under Five Psychotherapy: Work in Progress**



*Maria Emilia Pozzi-Monzo (Great Britain)*

This presentation is on the research-in-progress on the process of change in parent-infant/underfive psychotherapy. The project is part of my doctoral research at the Tavistock Clinic and University of East London. It begins by looking at some principles and philosophy underlying these brief treatments. It then explores the states of mind of parents wanting help for their infants and underfives presenting functional problems. These states of mind tend to move on a continuum between two polarities: schizo-paranoid and depressive. My hypothesis is that, during treatment, changes occur in parental states of mind and these correlate with changes in the child's inner world. It is predicted that the child, too, will change with regard to the quality of his relationships and play and be freed on his/her developmental path. Nine families have agreed to take part to this study and their treatments have been videotaped. Blind raters have scored selected clusters from two sessions and identified changes in parental states of mind. These will be correlated with changes scored in the child's behaviour as shown in those selected clusters, by using existing scales applied to videotaped material. Research difficulties are also highlighted.

**787 Psychoterapeutic Treatment of Twins and Triplets**

*Marie Christine Laznik, Marianne Lalou Moatti, Ondine Bomsel-Helmrieck, Myriam Szejer (France)*

Dialogue between psychoanalytically-oriented clinicians caring for babies who are twins or triplets and their parents, and a researcher in reproductive biology specialized in twinship. Twinship is a relatively frequent phenomenon, Medically-assisted procreation increases their proportion; it introduces the question of embryonic reduction, creates new mourning problems, while pregnancies using a donated egg confront us with a new work of subjective appropriation of maternity for these mothers. The pathologies of twinship have often been described, with their array of fantasies about the clone or the double. Reproductive biology teaches us that genetically identical twins do not develop their potential in the same way during their life in utero and afterwards. So, in terms of phenotype, the result will not be the same. Then the fantasy is an effect of parental reverie about narcissistic completeness or rather the exacerbation of this completeness as a of protecting against a maternal depression that leaves the twins without any other psychical support. Two clinical cases: The first concerns therapeutic consultation for triplets produced by medically-assisted procreation and their parents. The second involves twins born from single donor eggs, whose mother presents a post-partum depression. There were two other risks: this woman's faced with the fantasized presence of the egg donor and the risk of pathological twinship. A clinical treatment protocol was established with two analysts therapists, in order to aloud the possibility of subjectivation for each of them.

**788 Supporting Child-rearing of Children with Autism: From the Clinical Viewpoint of Related Development**

*Ryuji Kobayashi (Japan)*

Recently, as epitomized by the International Classification of Functioning, Disability and Health (ICF), development and disability have gained clear recognition as being the outcome of mutual interaction between the individual and the environment. However, child-rearing support for developmental disorders to date has primarily been attempts at promoting development or adjusting the environment as the result of multifarious evaluation capturing the disorders as impediments to development of the child's capabilities. Following examination of the mutual interaction between the child (individual) and caregiver (environment) giving rise to the variegated problems pertaining to development seen in children today, we have been providing support focusing on the relationship between child and caregiver, which we call "support for related development". Citing a number of concrete examples to illustrate problems in relationship arising between the child and caregiver, some points will be raised.

**789 The Multidisciplinary Basis of the Research Program Pile (International Program for the Children's Speech)**

*Bernard Golse (France)*

PILE, (International Programme for the Language of Children) is a scientific programme which puts together teams of social sciences and mathematical sciences (LISIF, MAPMO Université

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d'Orléans, CERMICS- ENPC Paris, IRCAM, Marne La vallée). PILE clinical evaluation after 9 months, (L.OUSS, C. BENONY, R. SIMAS) PILE transdisciplinary clinical tool explores the language development among the babies over 9 months, and more generally, intrapsychic processes in link with intersubjectivity, and their bodily, neurological, biological and genetical taking root. The baby's vocalisation and the mother-children's interaction (X. RODET, J. KISS, G. PEETERS) This presentation constitutes a state of art of PILE program research, for the part concerning the analysis of the baby's sound environment. . A Multi-camera system for babies' gaze and hand gesture analysis. ( M. MILGRAM, K. BAILLY, X. CLADY) To provide objective measurement of baby's movement, we define a specific camera network based on three fields of view : a first one is restricted to the face in order to track pupils. A second one is dedicated to baby's hands gesture. And a third one, is used for locating mother head position. Statistical analysis of the evolution of the baby's movements and voice (J.-F. DELMAS, D. CHAUVEAU, J. FOKI ) We present several approaches for the statistical analysis of the continuous-time signals obtained from the babies' hands and gaze tracking, together with their voices, extracted from the videos of the PILE program.